

USB ADSL Modem

User Manual

Table of Contents

About This Manual	2
Overview.....	3
ADSL Operating Modems.....	6
USB ADSL Modem Installation and Software Setup.....	8
LAN Driver Installation.....	9
Configuration Your ADSL Modem Networking Settings – LAN.....	34
WAN Driver Installation.....	36
Configuration Your ADSL Modem Networking Settings – WAN.....	62
Uninstall ADSL USB Modem.....	65

About This Manual

This manual provides a comprehensive user's guide and installation manual for USB ADSL Modems. It has been organized in such a way to make it easy to follow by users worldwide. In order to ensure optimal comprehension, the following list provides brief descriptions of the formatting styles used throughout this manual.

- ❑ **Commands**: Commands are always referred to by using the word “ **Click** ” before them. These commands are always shown as bold-faced words. For example, click **Next**, click **OK**, or click **Cancel**.
- ❑ **Names of Windows (Dialog Boxes)**: The names of the windows (also referred to as dialog boxes) that appear on the PC screen are always referred to in quotes. For example, the “ **Setup Complete** ” window.
- ❑ **Names of Options in Windows**: The names of options to choose from inside the windows that appear on the PC screen are always referred to in italics. For example, choose the ***Yes, I want to restart my computer now*** option from the window.
- ❑ **Notes**: In some cases, preparatory or cautionary information is needed before proceeding onto the next step in an installation process. This kind of information is provided in the form of notes, which are always referred to in bold-faced and italicized letters. For example,

Note : To access the Control Panel, the driver must be running. Also, make sure the USB cable is plugged into the modem.

Overview

About ADSL

This USB ADSL Modem combines an “always on” high speed Asymmetric Digital Subscriber Line (ADSL) connection to the telephone line, and a Universal Serial Bus (USB) connection to a host PC into a complete and effective system. The USB ADSL Modem is compliant with the full-rate ANSI T1.413 Issue 2 and ITU G.dmt (G.992.1) ADSL standards, and with the splitter less ITU G.lite (G.992.2) specification. This rate-adaptive solution is designed for Customer Premise Equipment.

Protocol and Device Driver Selection

This USB ADSL Modem takes advantage of the processing power available with today's computers by eliminating the need for a separate micro controller supporting the ATM Segmentation and Reassembly (SAR) function, resulting in a cost-effective ADSL solution suitable for both full-rate and G.lite applications. Additionally, host-based software supports industry standard functions PPP over ATM (PPPoA) per RFC 2364, PPP over Ethernet (PPPoE) per RFC 2516, Bridged/Routed Ethernet per RFC 2684/1483, and Classical IP over ATM per RFC 2225/1577. Supported operating systems are Windows 98, Windows 98se, Windows 2000, Windows ME, and Windows XP. The USB specification version 1.1 is supported and is the preferred standard method to connect peripherals to PCs.

During periods of no data transmission, this USB ADSL Modem performs idle cell insertion and deletion thus unloading this task from the host PC. ADSL is a transmission technology used to carry user data over a single twisted pair line between the Central Office and the Customer Premises. The downstream (Central Office to Customer Premises) direction typically supports a much higher data rate than the upstream or return (Customer Premises to Central Office) channel. This asymmetric nature lends itself to applications like remote LAN access, Internet access, and video delivery.

Data rates up to 8 Mbps downstream and up to 1 Mbps upstream are supported for full rate. Data rates up to 1 Mbps downstream and up to 512 Kbps upstream are also supported for G.lite. Actual data rates depend on the transceiver implementation, loop length, impairments, and transmitted power. The USB ADSL Modem Device is based upon a scalable architecture. This architecture enables the device to support splitter less G.lite as well as splintered and splitter less full-rate ADSL. G.lite enables telephone companies to deploy consumer oriented, “Always on” 1.5 Mbps Internet access services without the need for splitter equipment, micro-filters, or wiring changes at the customer premises.

Host Software

The host software NDIS miniport driver provided implements the ATM Adaptation Layer 5 (AAL5), which is composed of two sub layers:

- 1) The Segmentation and Reassembly (SAR) layer,
- 2) The Convergence Sub layer (CS).

The AAL5 protocol provides virtual connections, which offer error detection, but not error correction, between end stations attached to the same network. The SAR sub layer transmitter segments the higher layer information into a size suitable for the payload of the ATM cells of a virtual connection. The receiver reassembles the contents of the cells of a virtual connection into data units to be delivered to higher layers.

During periods of no data transmission, the device, and not the host software driver, performs idle

cell insertion and deletion, thus unloading this task from the host PC and unburdening the USB with unnecessary traffic.

The Convergence Sub layer performs message identification and clock recovery. Additionally, the CS of the AAL converts the user service information coming from the upper layer into a protocol data unit (PDU), and also carry out the opposite process at the receiver.

Unspecified Bit Rate (UBR) service is supported. It allows a connection to be established without specifying the bandwidth expected from the connection. The network makes no guarantees for UBR service: it establishes the route but does not commit bandwidth. UBR can be used for applications that have no delivery constraints and do their own error and flow control. Examples of potential uses of UBR are e-mail and file transfer, as neither application has real-time characteristics.

Constant Bit Rate (CBR) service allows a connection to be established with a specified expected bandwidth. CBR can be used for an application such as video delivery.

Features

Protocols and Interface

- Complete USB ADSL modem solution
- Compliant with ADSL standards
 - ✓ Full-rate ANSI T1.413 Issue 2 and ITU G.dmt (G.992.1) standards
 - ✓ Splitterless ITU G.lite (G.992.2) specification
- DMT modulation and demodulation
- Full-rate adaptive modem
 - ✓ Maximum downstream rate of 8 Mbps
 - ✓ Maximum upstream rate of 1 Mbps
- Supports splitterless ADSL implementation
- Supports Dying Gasp
- WAN mode support
 - ✓ PPP over ATM (RFC 2364)
 - ✓ PPP over Ethernet (RFC 2516)
- LAN mode support
 - ✓ Bridged/routed Ethernet over ATM (RFC 2684/1483)
 - ✓ Classical IP over ATM (RFC 2225/1577)
- Tone detection for low power mode
- ATM SAR performed in software driver
- USB host interface
 - ✓ Compliant with USB Specification, Revision 1.1
 - ✓ USB full speed (12 Mbps)
 - ✓ Suspend/Resume
 - ✓ Vendor specific descriptors
 - ✓ Bus powered USB device

Bus Type

USB Type B connector

Cables & Connectors

1 RJ-11 cable & 1 Type A/B USB cable

OS Support

- Windows 98FE
- Windows 98SE
- Windows ME
- Windows 2000
- Windows XP

System Requirement

- Pentium 166 MHz MMX-compatible PC or greater.
- 32 Mbytes RAM or more.
- 10 Mbytes free disk space or more.

Physical Description

Dimension : 127mm (L) x 75mm (W) x 1.6mm (H)

Operating Environment

Operating	+0°C ~ +50°C
Non-operating	−20°C ~ +70°C

Humidity

Operating	20%~80% RH
Non-operating	20%~80% RH

Status LED

1 LED indicates Transmit/Receive data
 1 LED indicates Power

ADSL Operating Modes

Full Rate ADSL Modes

Both T1.413 and G.992.1 (G.dmt) line coding schemes are supported for downstream rates up to 8 Mbps and upstream rates up to 1 Mbps in 32 Kbps increments. User selection of mode is supported through the provided control panel, however, auto provisioning is supported so that the appropriate modulation is automatically selected based on what is supported by the DSL Access Multiplexes (DSLAM) at the Central Office. When operating in one of the full-rate modes, the low (POTS) and high frequency (ADSL) bands must be separated with a filter. This can be done with either a service provider-installed splitter (known as “splittered ADSL”), or with the use of distributed micro-filters in line with each POTS device on the circuit (known as “splitter less full-rate ADSL”). Both deployment models are supported.

G.lite Splitter less Mode

G.992.2 (G.lite) splitter less mode is supported for downstream rates up to 1.5 Mbps and upstream rates up to 512 Kbps in 32 Kbps increments. User selection of mode is supported through the provided control panel, however, auto-provisioning is supported so that the appropriate modulation is automatically selected based on what is supported by the DSLAM at the Central Office. When operating in splitter less mode, the low and high frequency bands do not need to be separated with a filter, and neither a service provider. Neither installed splitter, nor distributed micro-filters are required. G.lite mode supports power management by defining a set of power management states for the link and the use of the Embedded Operations Channel (eoc) to coordinate between the ATU-R and ATU-C.

LAN Mode

Bridged or routed Ethernet over ATM (RFC 1483/2864) and Classical IP over ATM (RFC 1577/2225) are supported in the LAN driver. These protocols provide LLC or VCMUX encapsulation for carrying network interconnect traffic over a single ATM AAL5 Virtual Connection. LLC encapsulation is desirable when it is not practical to have a separate VC for each carried protocol, such as with an ATM network that only supports Permanent Virtual Circuits (PVCs). The provided NDIS 5 drivers automatically establish a “connection-less” calls using the defined PVC, and encapsulate Ethernet bridged frames.

WAN Mode

RFC-2364, PPP over ATM, is supported in the WAN driver. Point-to-Point Protocol provides a method of transporting multi-protocol packets over point-to-point links. Point to- point links allow for services such as Link Control Protocol, Network-layer Control Protocol, and authentication. The PPP over ATM standard brings this point-to-point services to the ATM network where they are not inherently supported. The provided NDIS 5 drivers accept an empty dial string on a specific “link” or PVC from Windows Dial-up networking to establish a call, and encapsulate PPP frames. User selection of WAN or LAN encapsulation protocols can be done manually via the provided control panel. However, auto-configuration is supported with the provided installation wizard, so that the protocol mode is selected properly without user intervention.

Ship Kit Contents

Your USB ADSL Modem is shipped with the following items:

- One USB ADSL Modem
- One RJ-11 cable
- One USB A/B cable
- One System CD (With software, manuals, readme files, Acrobat Reader, etc..)

Back Panel



LED Indicator



USB ADSL Modem Installation and Software Setup

WAN and LAN software drivers are supported. WAN and LAN applications support the Microsoft Windows 98/98SE, Windows Me, Windows 2000 and Windows XP operating systems.

Be sure to follow the instructions provided for your PC's operating system.

The following information may be required for software installation. Contact your DSL service provider before proceeding with software installation.

- Type of Driver to be Installed – WAN and LAN software drivers are supported. The choice depends upon your DSL service provider.
- IP Address Settings – the software installation process allows the server to dynamically assign IP Address settings. If your application requires static setting of specific address information you will need to know:
 - IP Address
 - Subnet Mask (for Bridged Ethernet applications only)
 - Default Gateway (for Bridged Ethernet applications only)
- Name Server Information – the software installation process allows the server to dynamically assign Name Server Address settings. If your application requires static setting of specific address information you will need to know:
 - Primary DNS Address
 - Secondary DNS Address
 - Primary WINS Address
 - Secondary WINS Address
- ATM Virtual Path ID (VPI)
Note: Required if not using default values for driver type
- ATM Virtual Circuit ID (VCI)
Note: Required if not using default values for driver type
- Encapsulation type
Note: Required if not using default values for driver type
- Modulation type
Note: Required if not using default values for driver type
- User Name (for PPP applications only. Please install WAN Driver)
- Password (for PPP applications only).

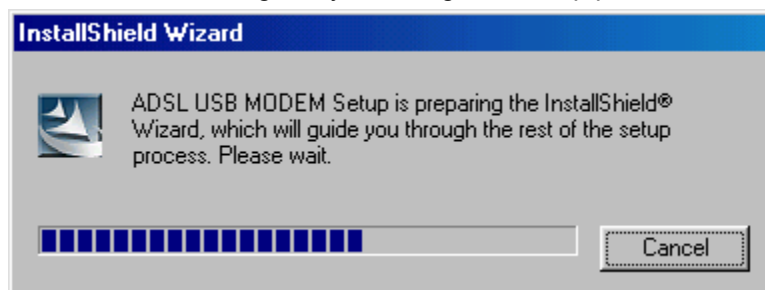
LAN Driver Installation

LAN mode: Bridged or routed Ethernet over ATM (RFC 1483/2864)
Classical IP over ATM (RFC 1577/2225)

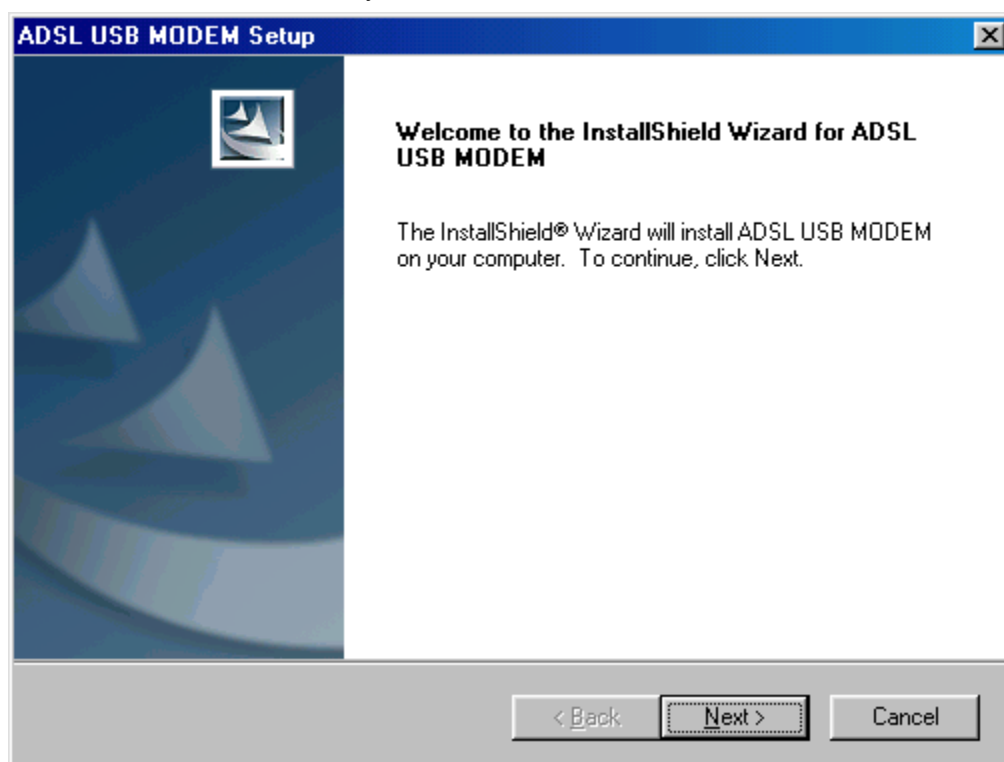
Notice: *Install the driver first. After the driver is installed, follow the instruction to connect USB ADSL Modem to the computer.*

Windows 98FE

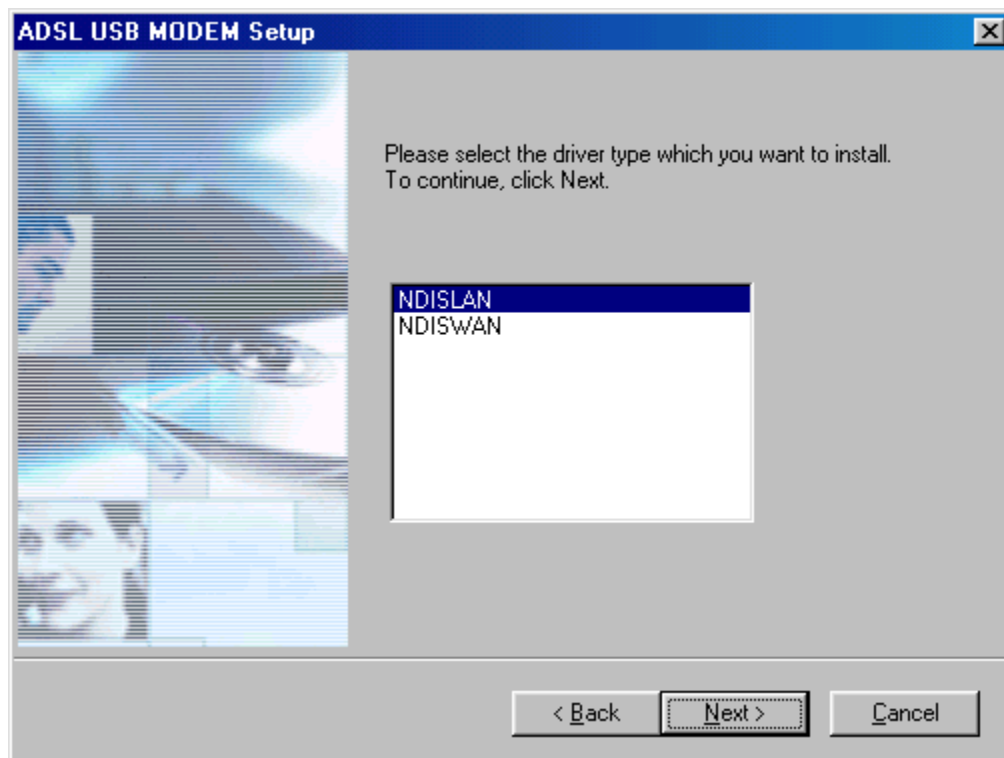
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



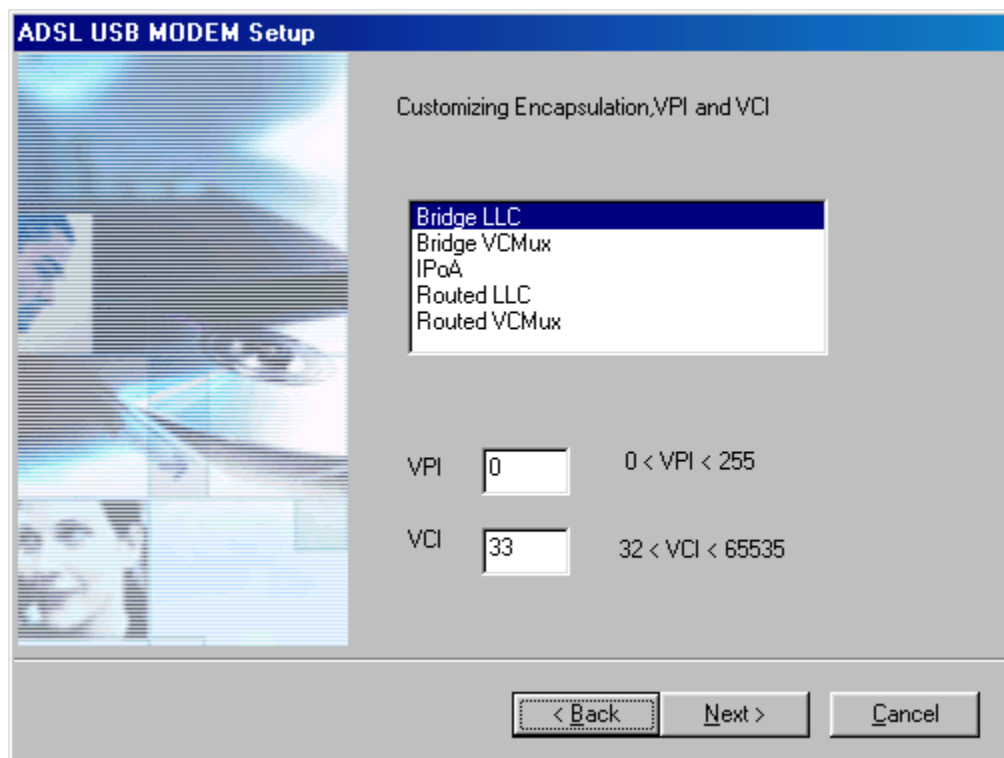
2. The install wizard is ready to install the driver. Click "**Next**" to continue.



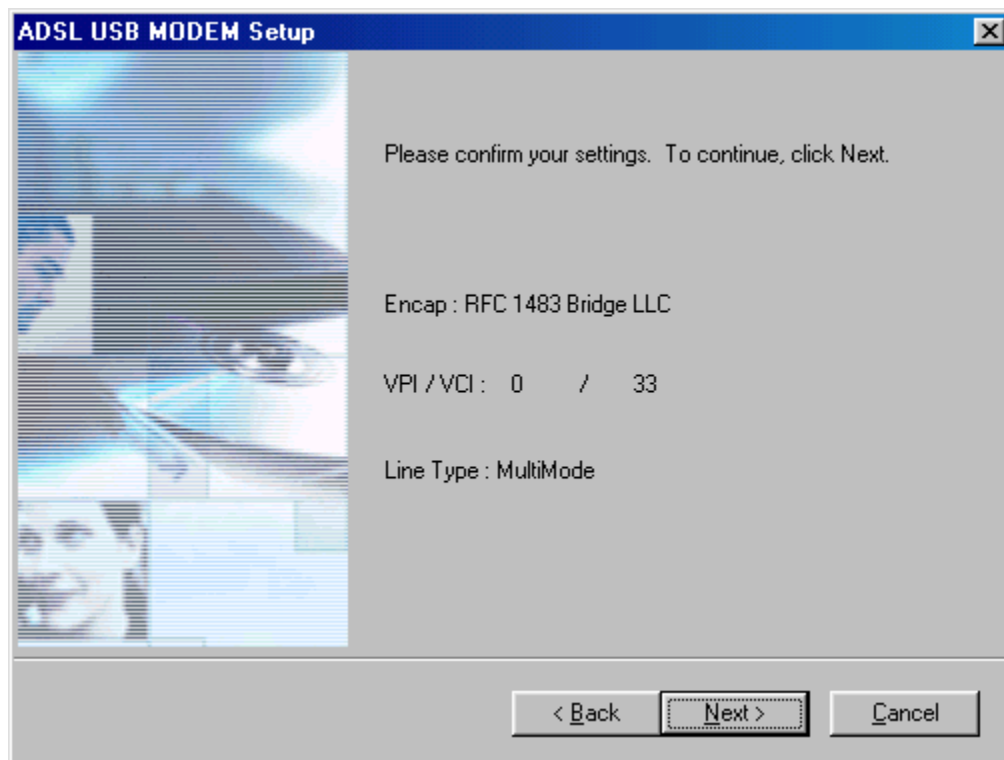
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click “**Next**” to continue.



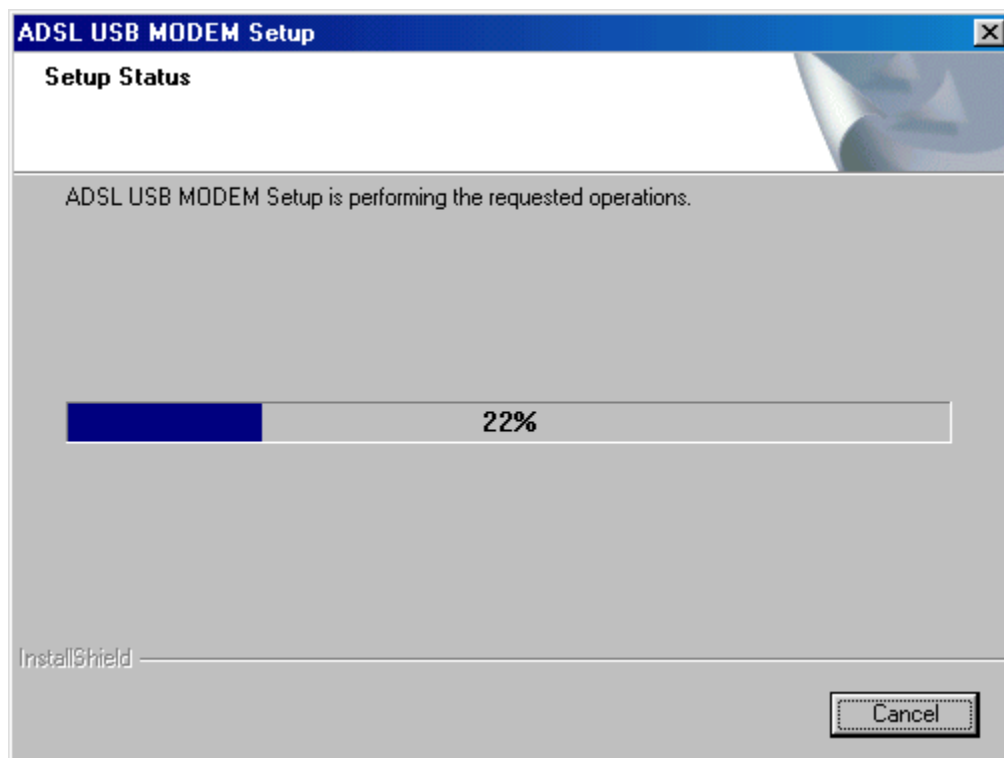
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click “**Next**”.



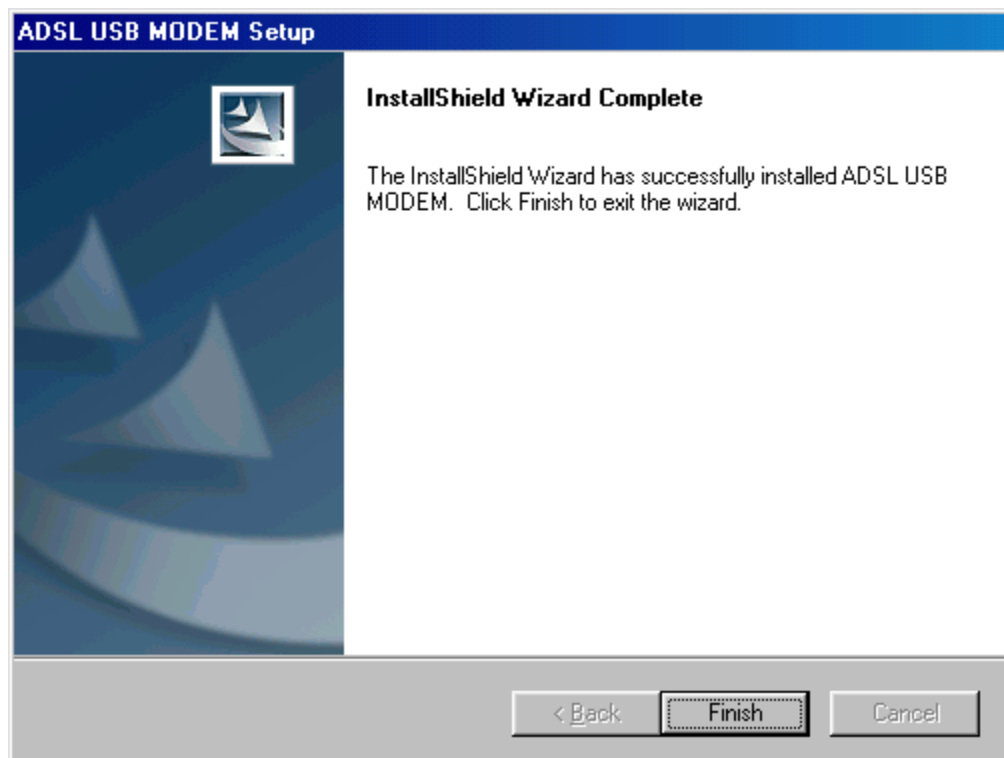
5. Please confirm the settings and click "**Next**" to continue.



6. The wizard is processing the installation.



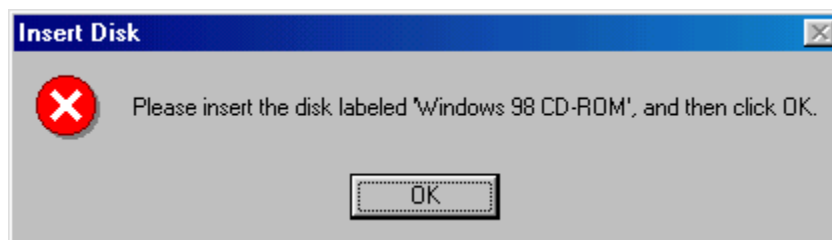
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



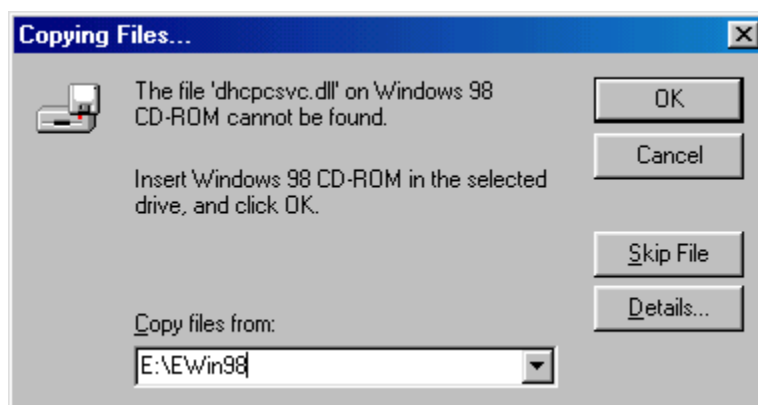
8. Connect USB ADSL MODEM into your computer.

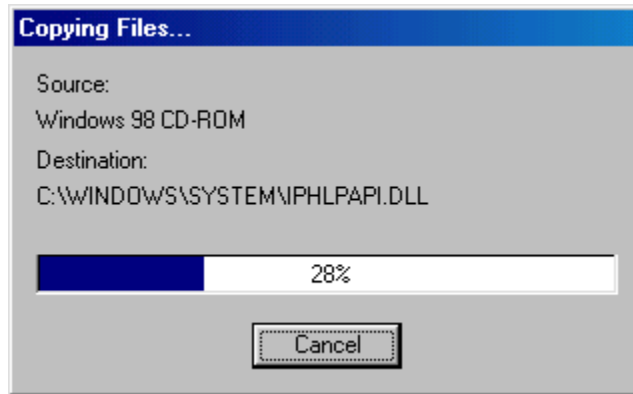


9. Insert Windows 98 CD-ROM disk and click “**OK**” to continue.

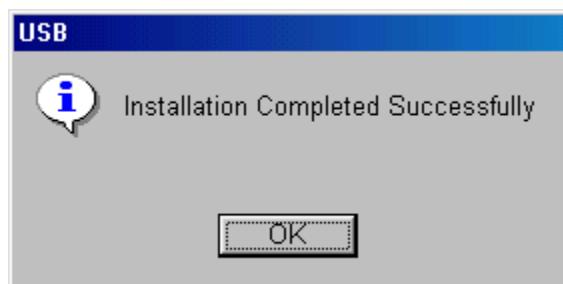


10. Specify Windows 98 CD-ROM disk location (ex. E:\Ewin98). Then click “**OK**” to continue.

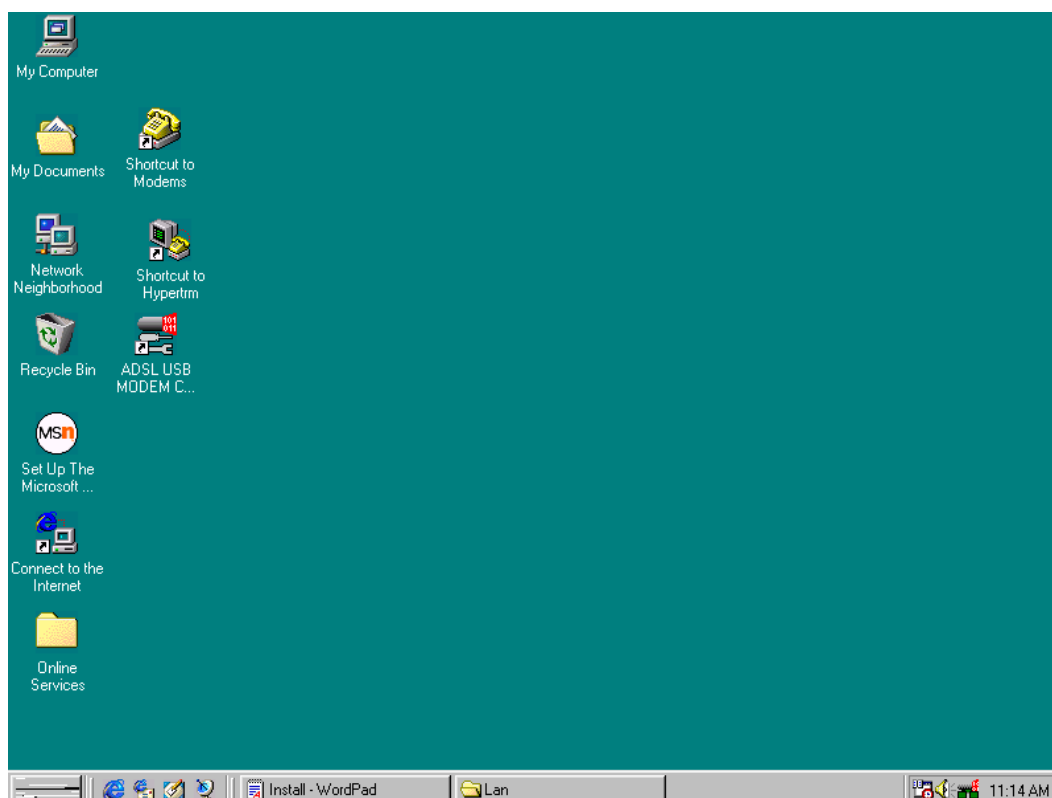




11. Installation is complete. Click "OK"

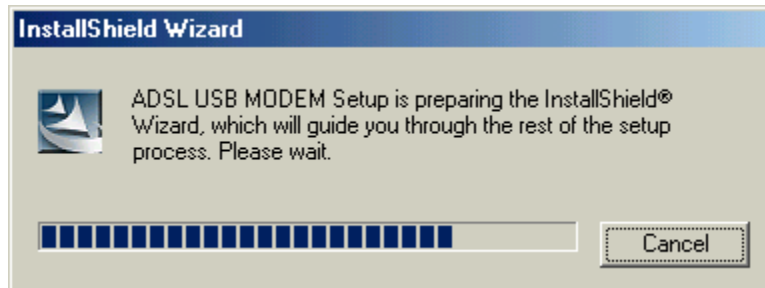


12. The shortcut of USB ADSL MODEM icon will display on the desktop.

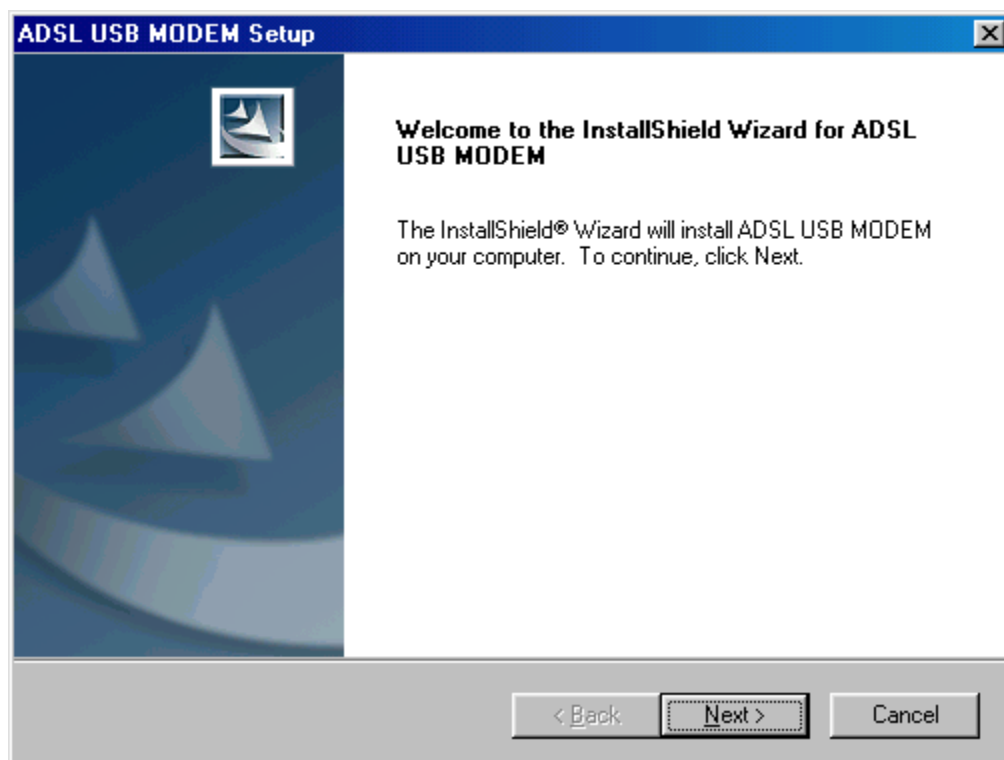


Windows 98SE

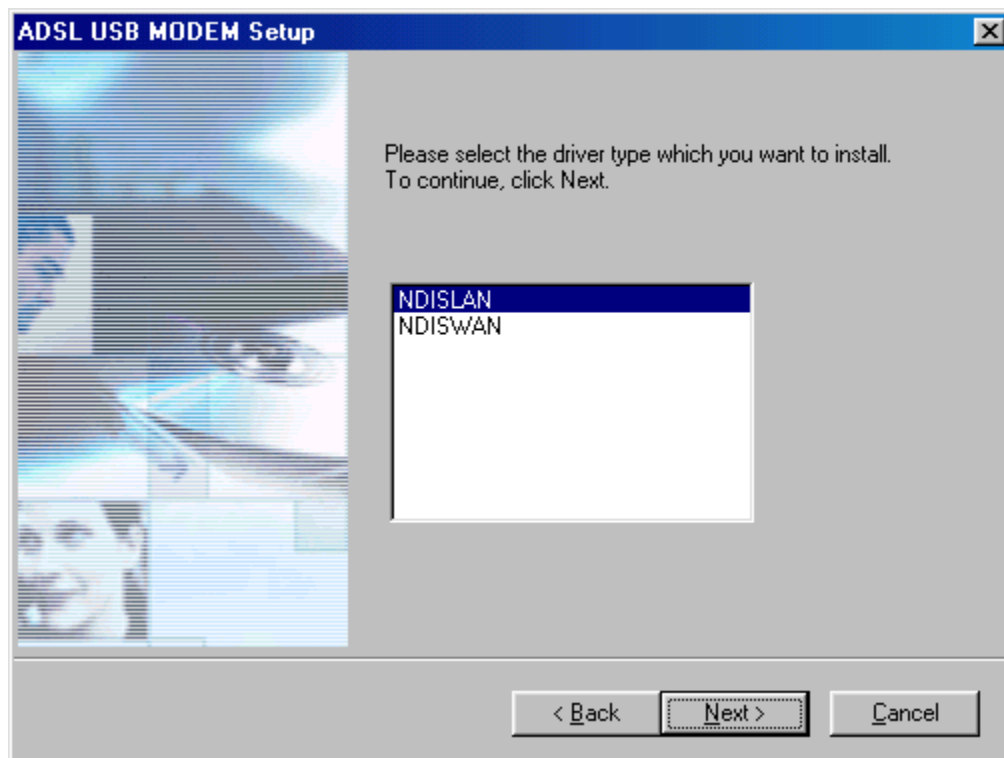
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



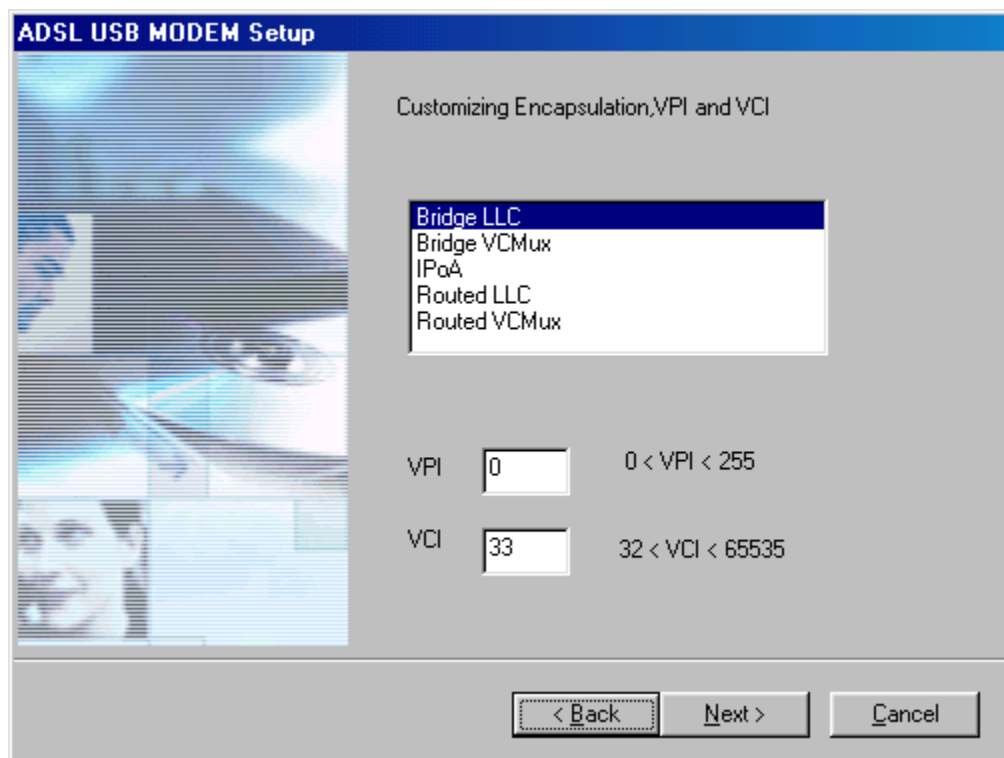
2. The install wizard is ready to install the driver. Click "**Next**" to continue.



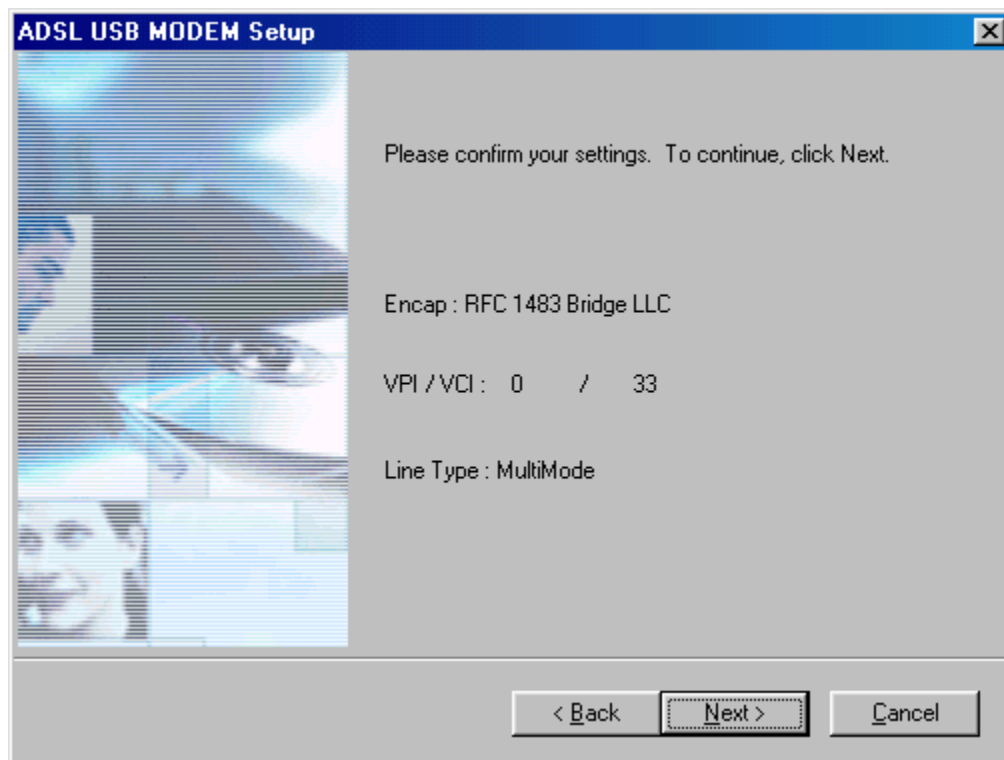
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click **“Next”** to continue.



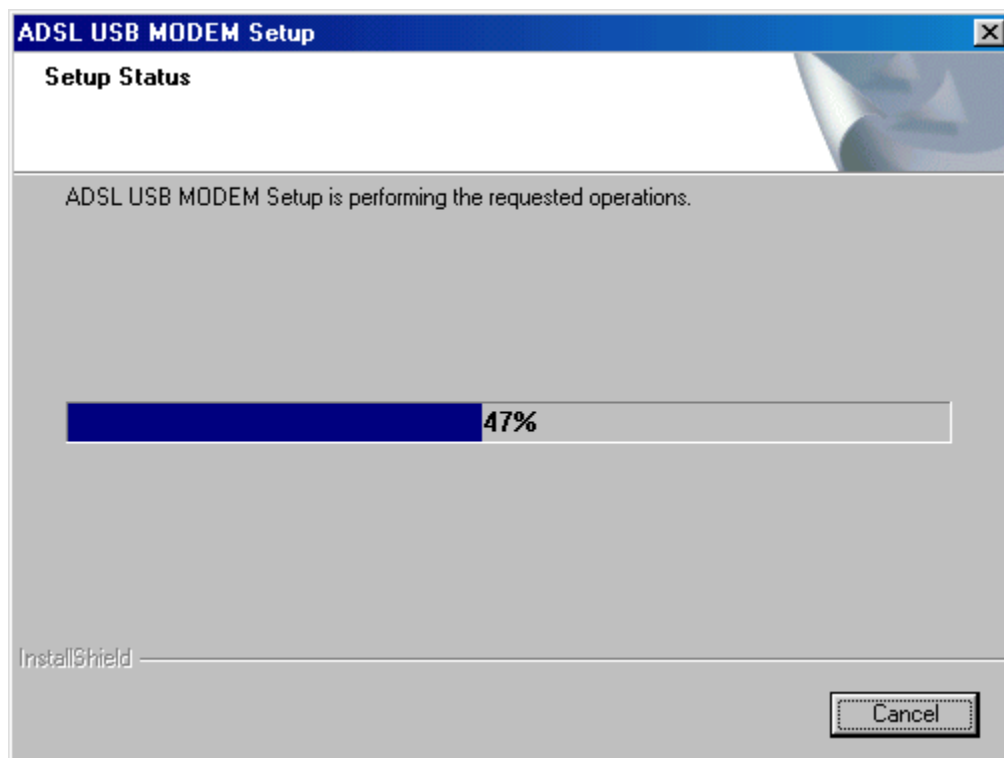
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click **“Next”**.



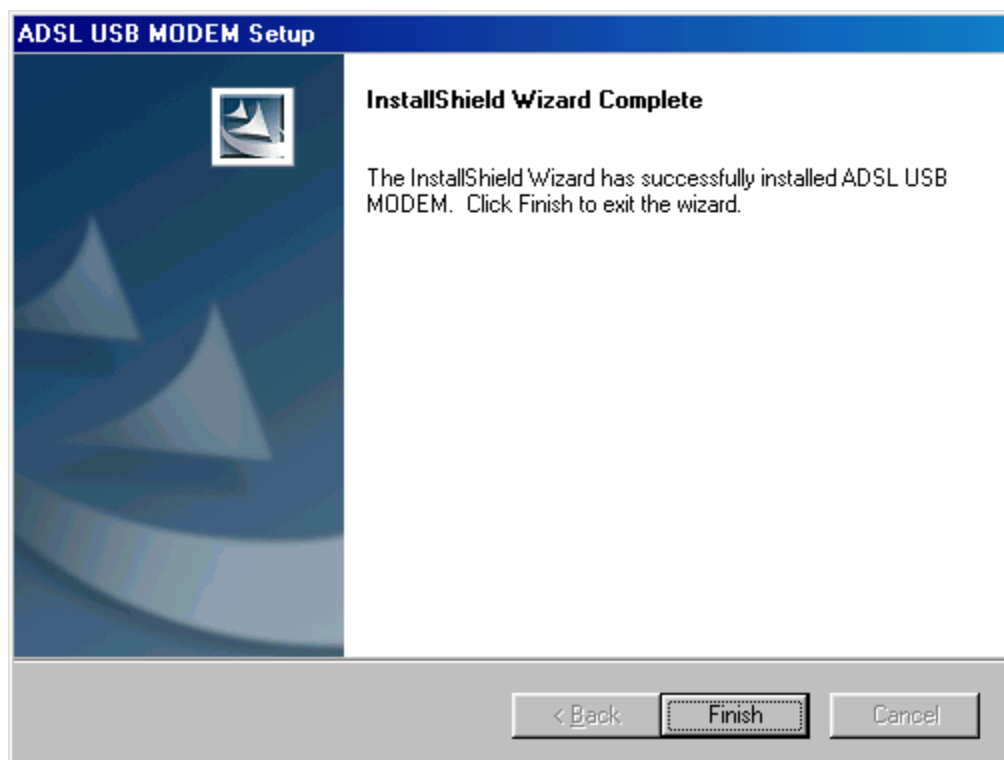
5. Please confirm the settings and click "**Next**" to continue.



6. The wizard is processing the installation



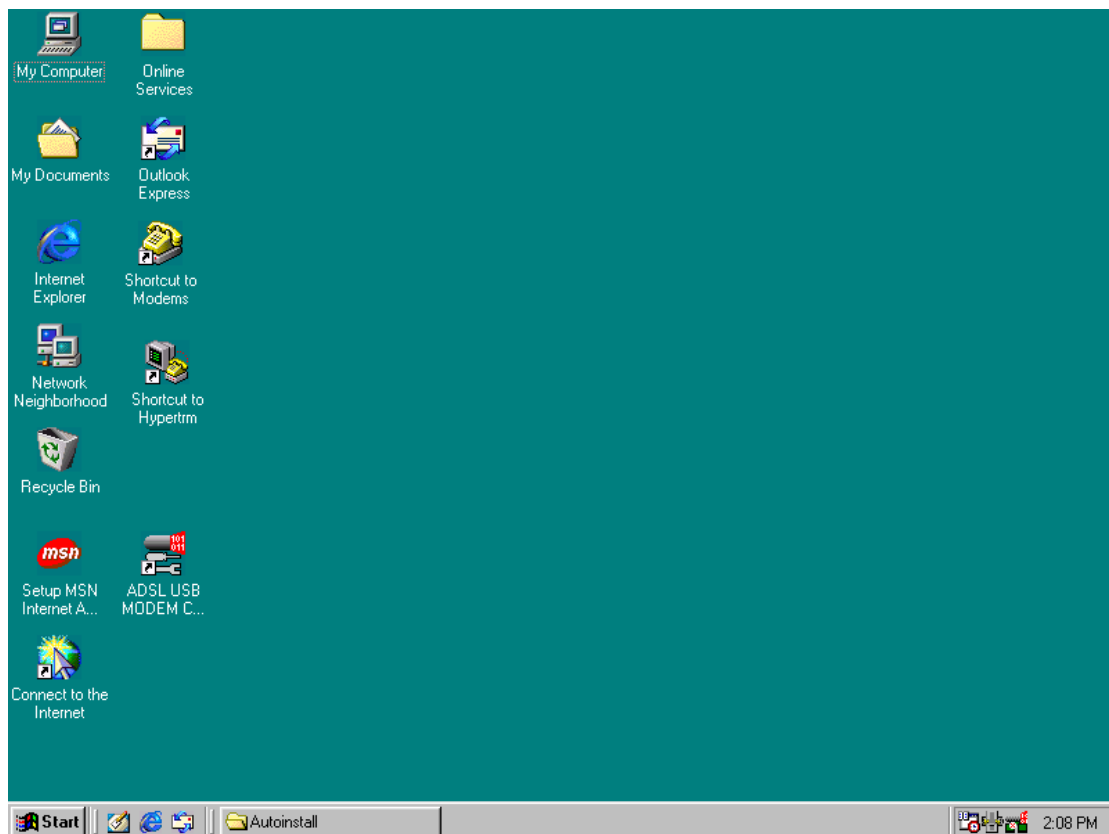
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



8. Connect USB ADSL MODEM into your computer.

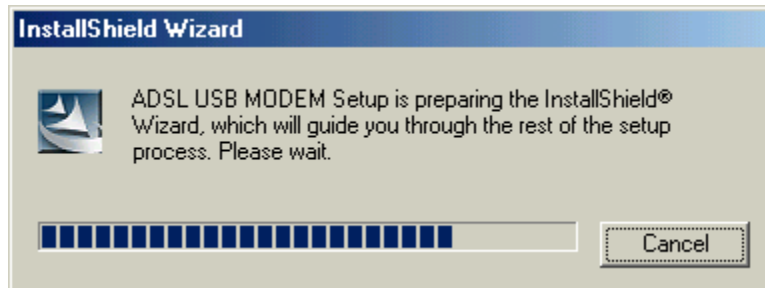


9. The shortcut of USB ADSL MODEM icon will display on the desktop.

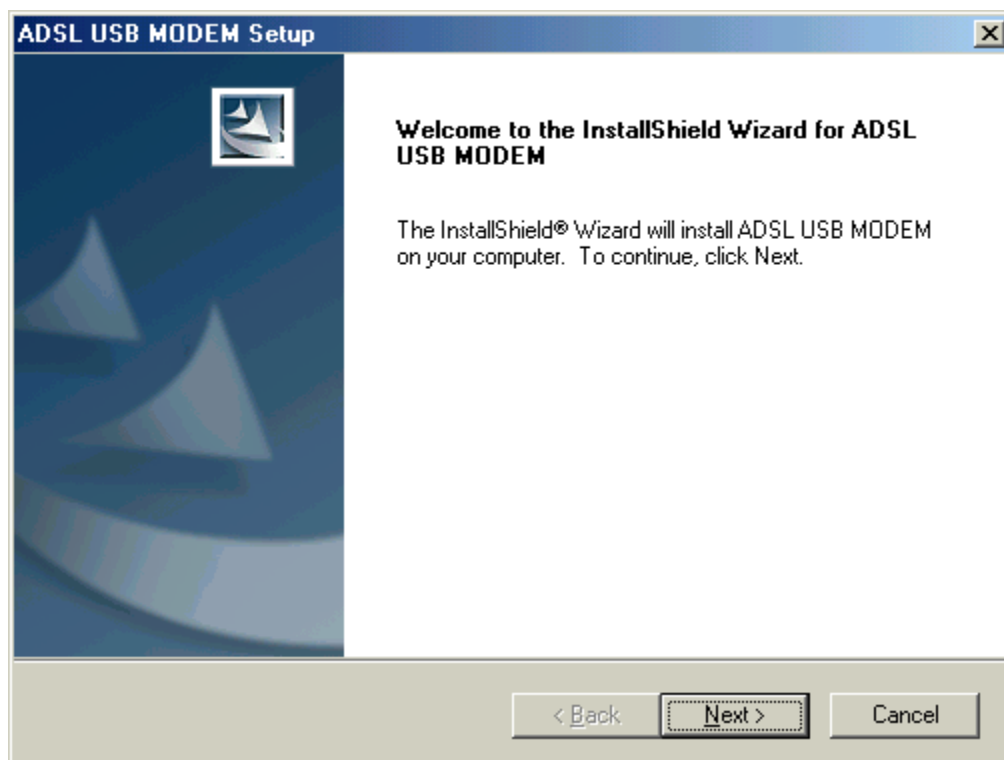


Windows ME

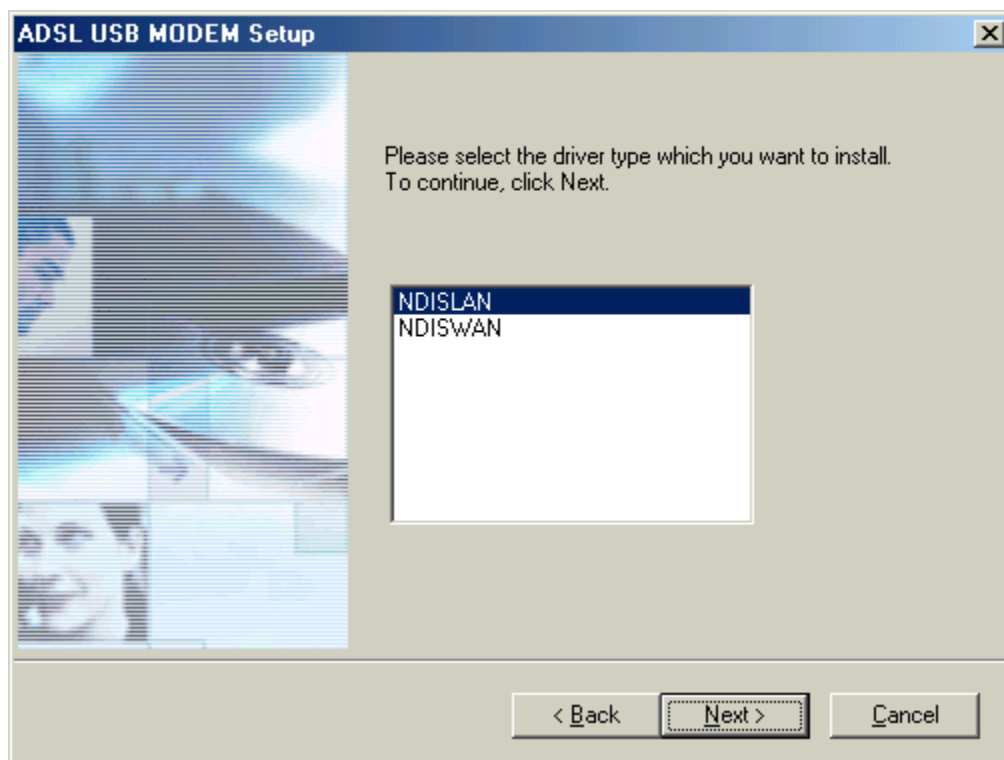
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



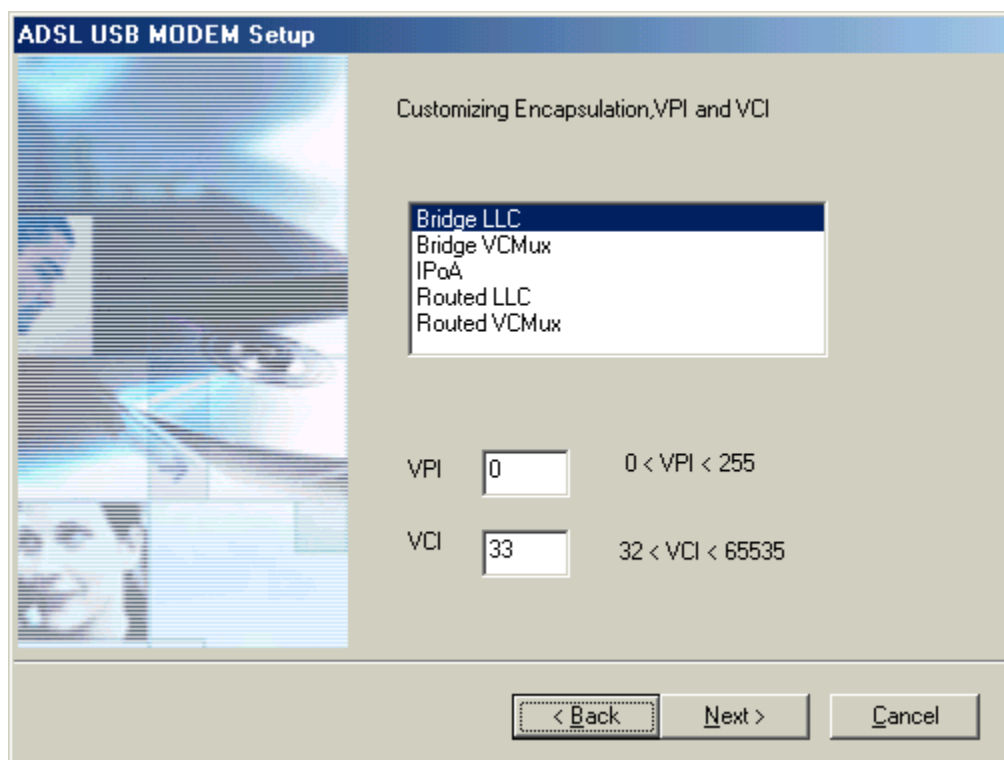
2. The install wizard is ready to install the driver. Click "**Next**" to continue.



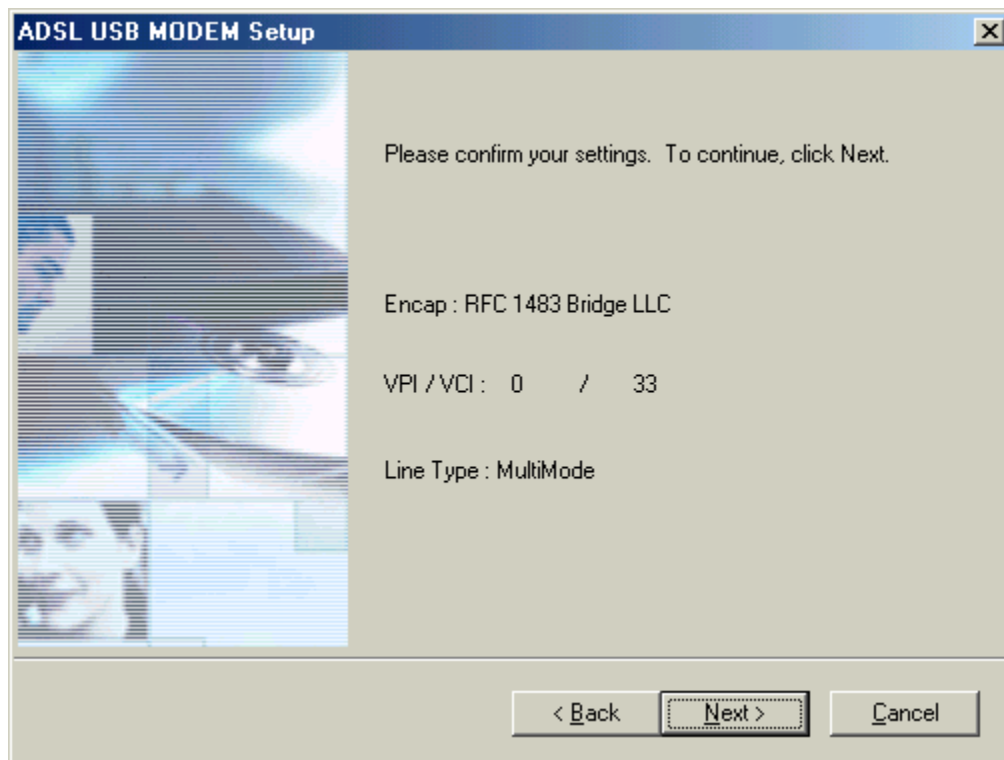
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click **“Next”** to continue.



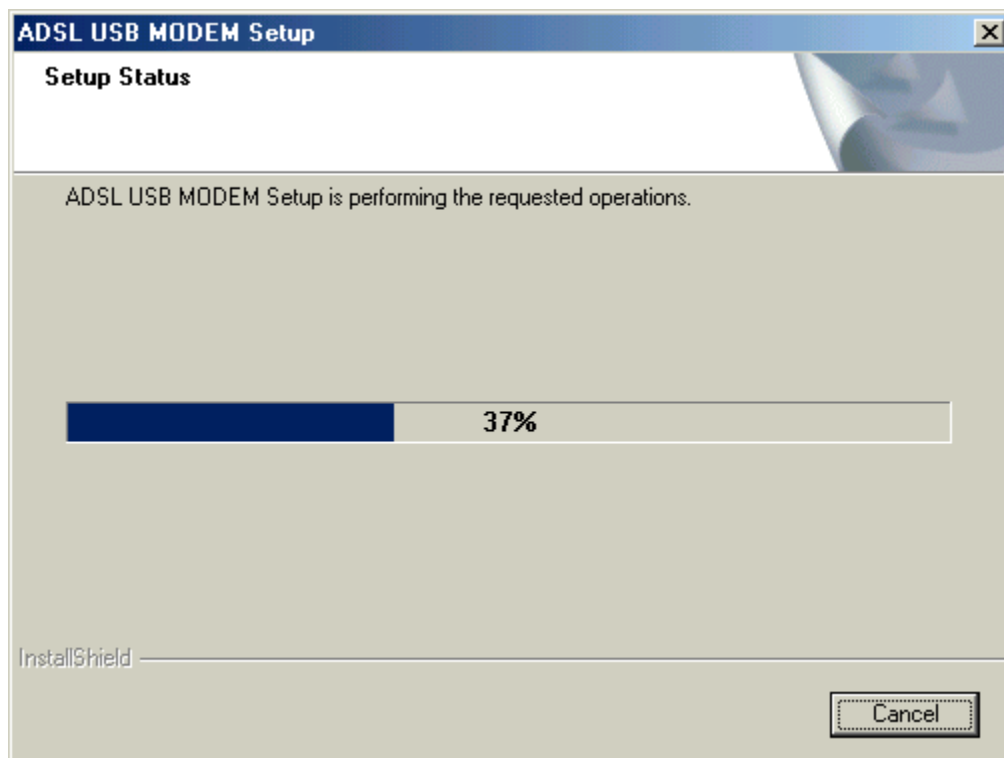
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click **“Next”**.



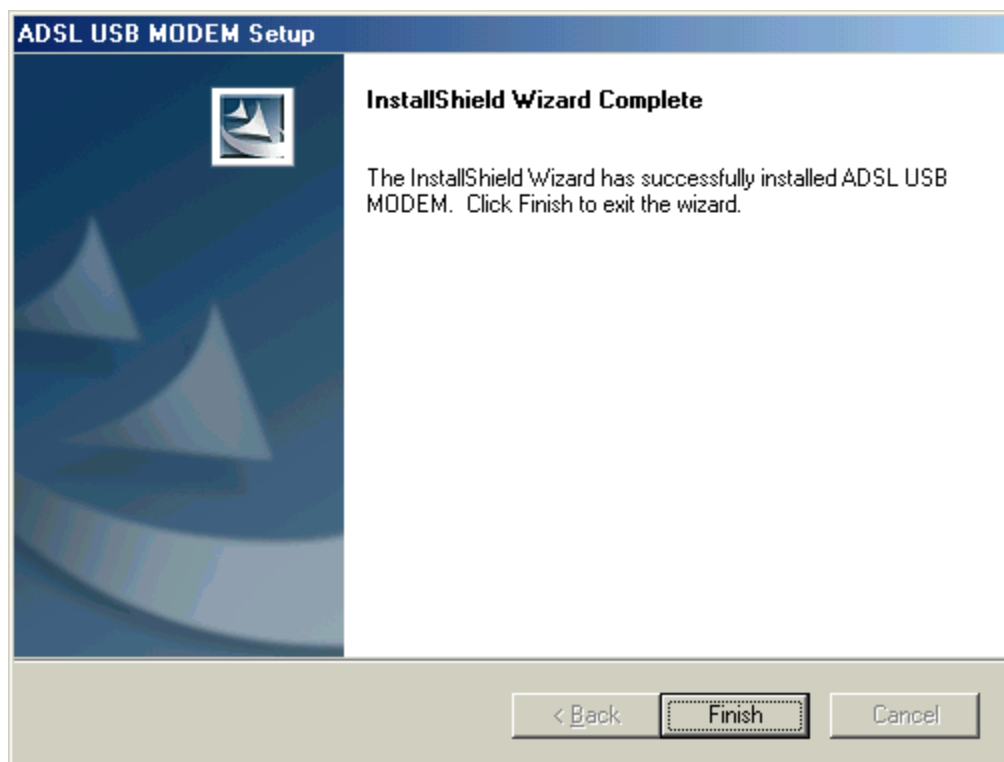
5. Please confirm the settings and click "**Next**" to continue.



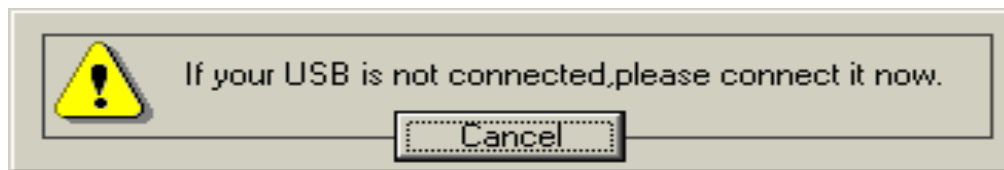
6. The wizard is processing the installation.



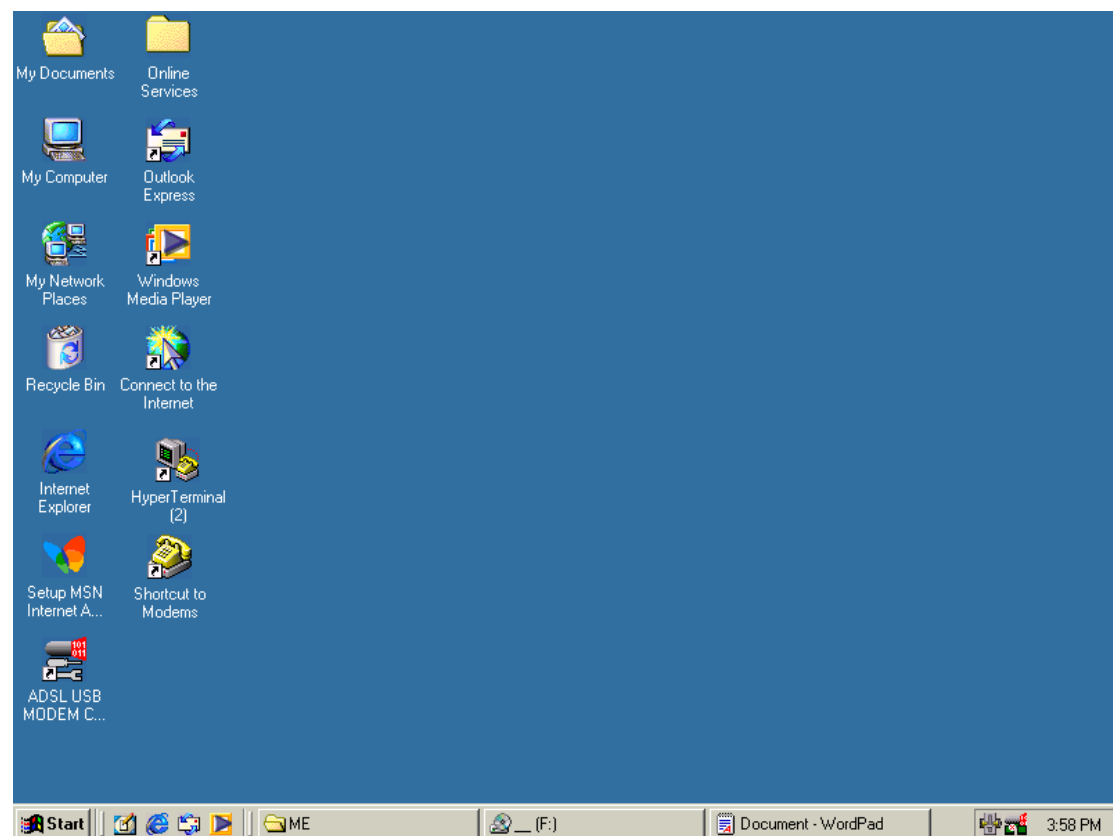
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



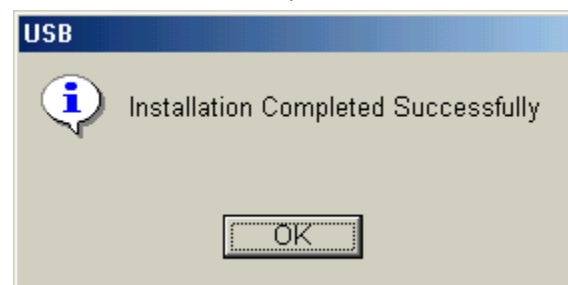
8. Connect USB ADSL MODEM into your computer.



9. The shortcut of USB ADSL MODEM icon will display on the desktop.

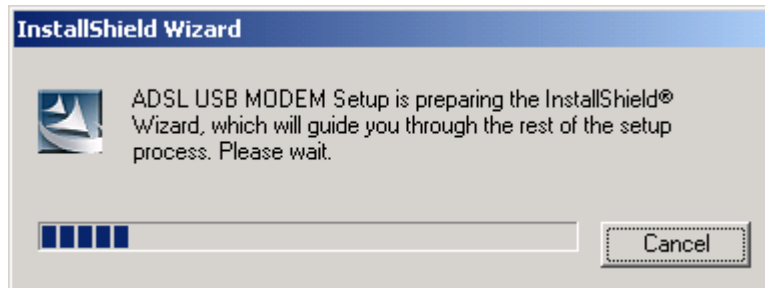


10. Installation is complete. Click “OK”.

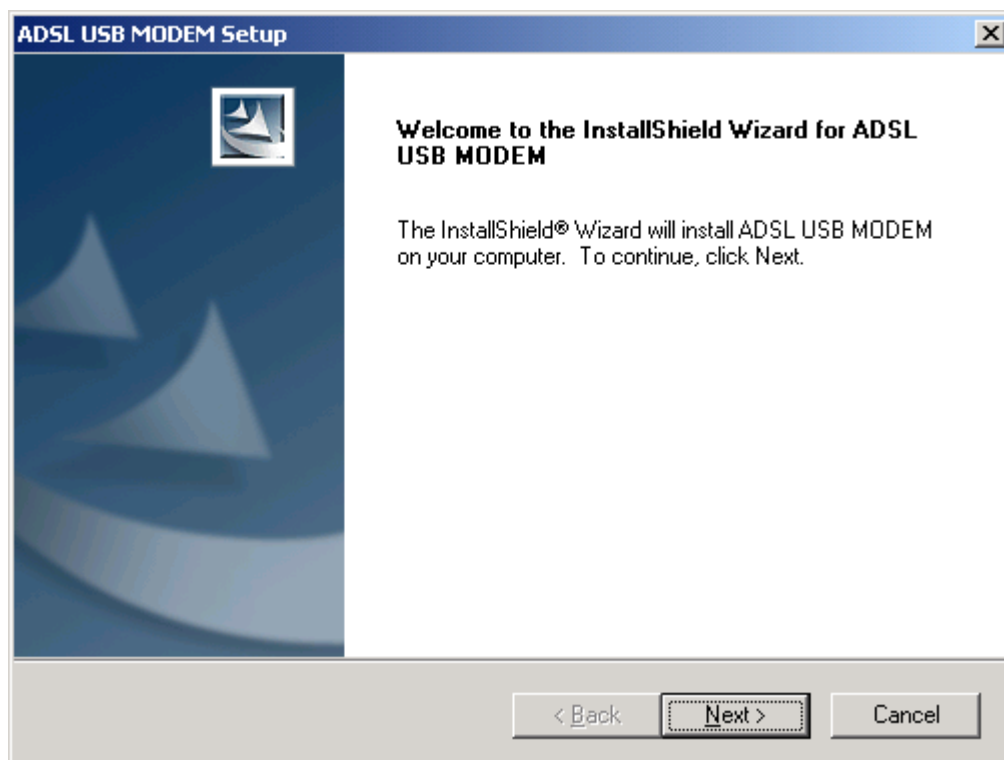


Windows 2000

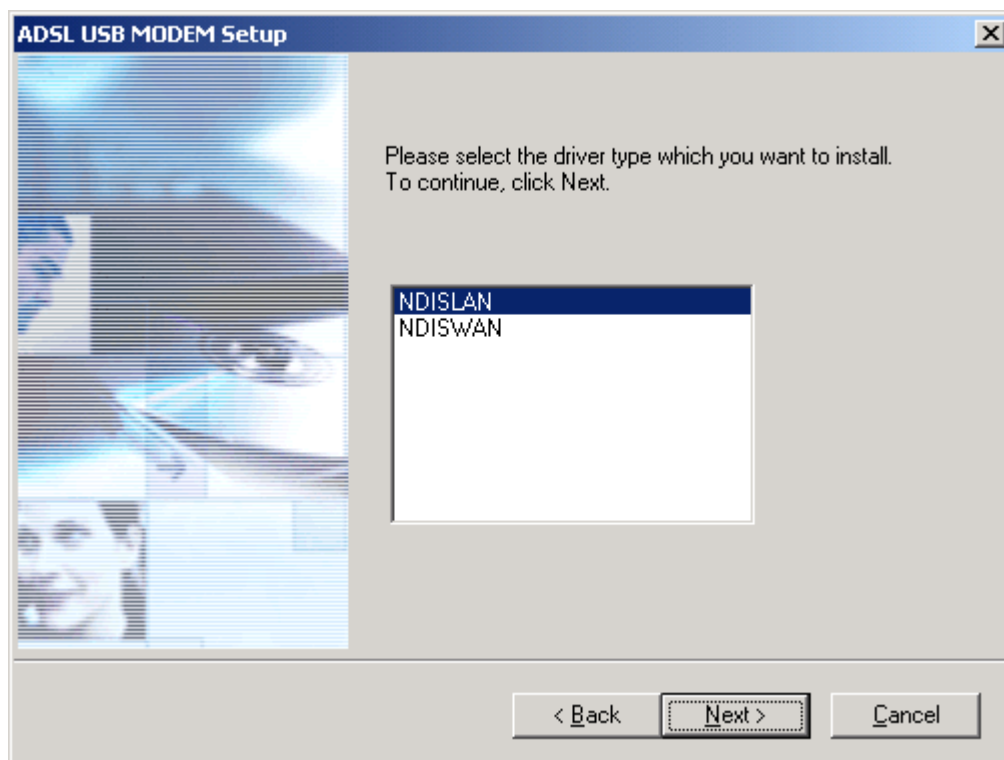
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



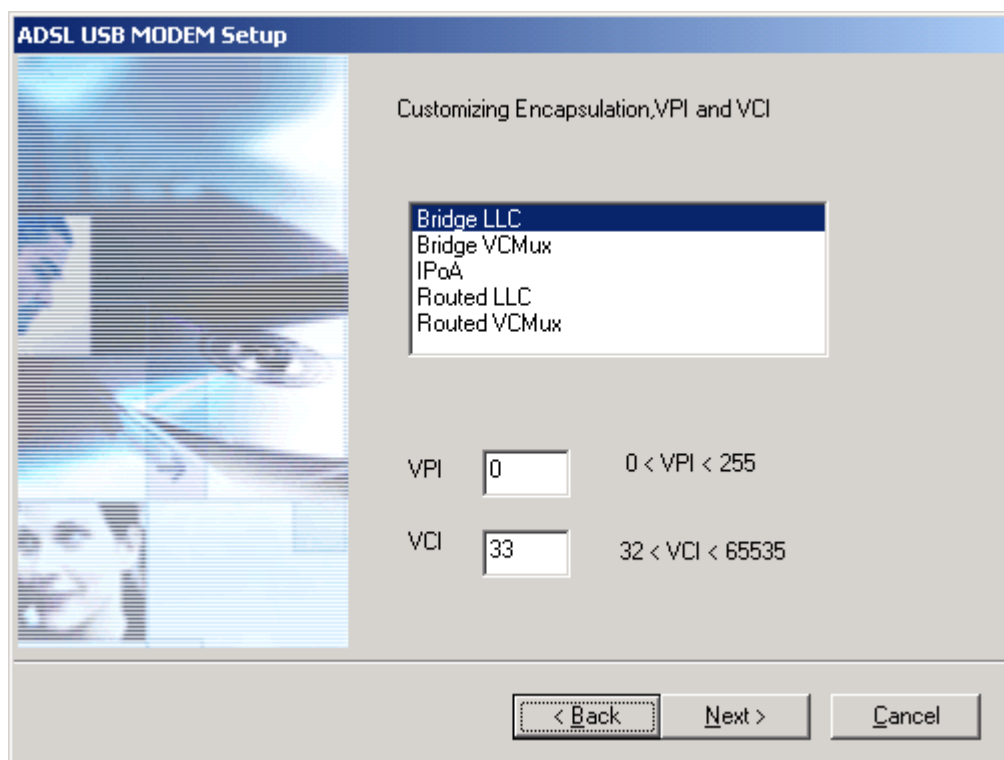
2. The install wizard is ready to install the driver. Click “**Next**” to continue.



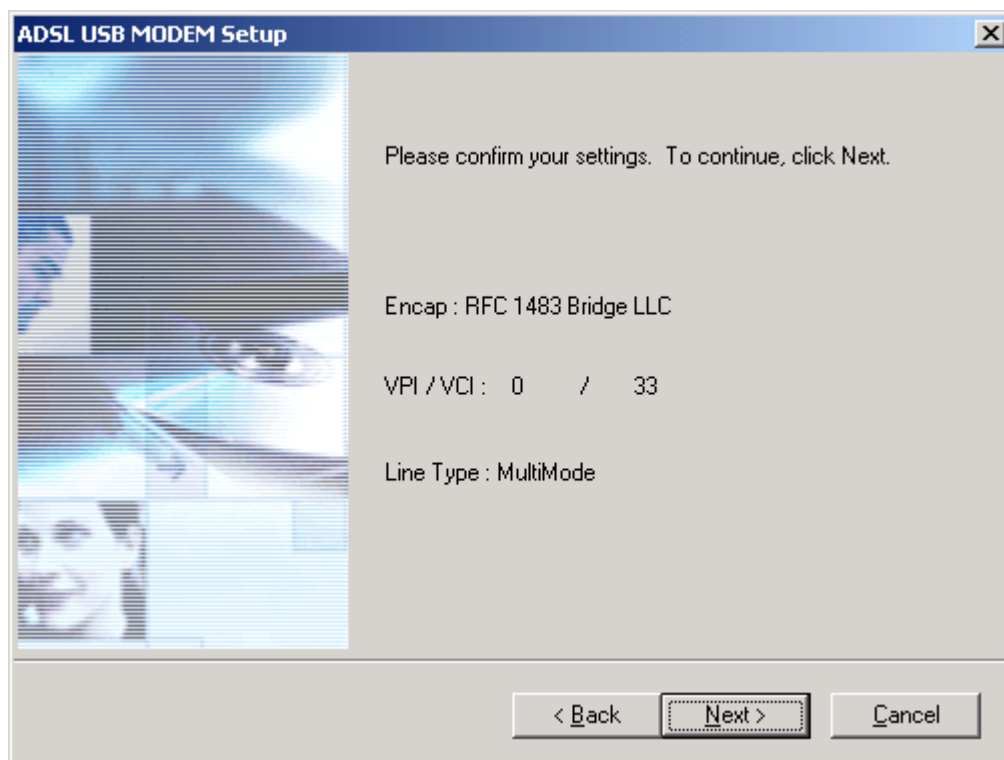
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click **“Next”** to continue.



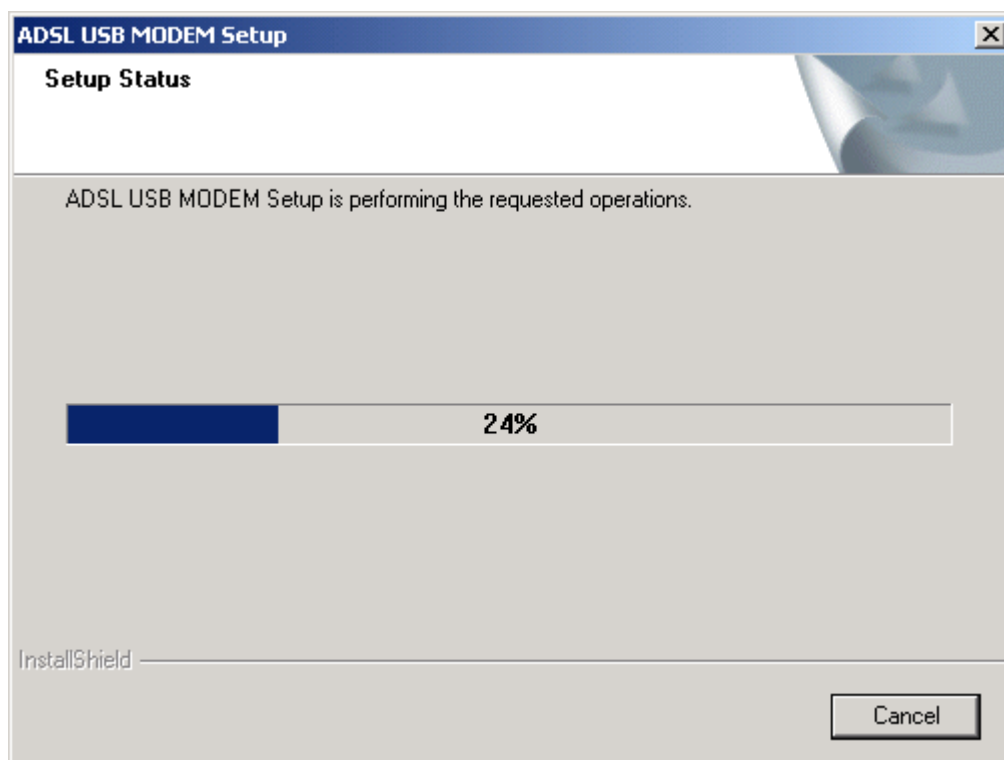
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click **“Next”**.



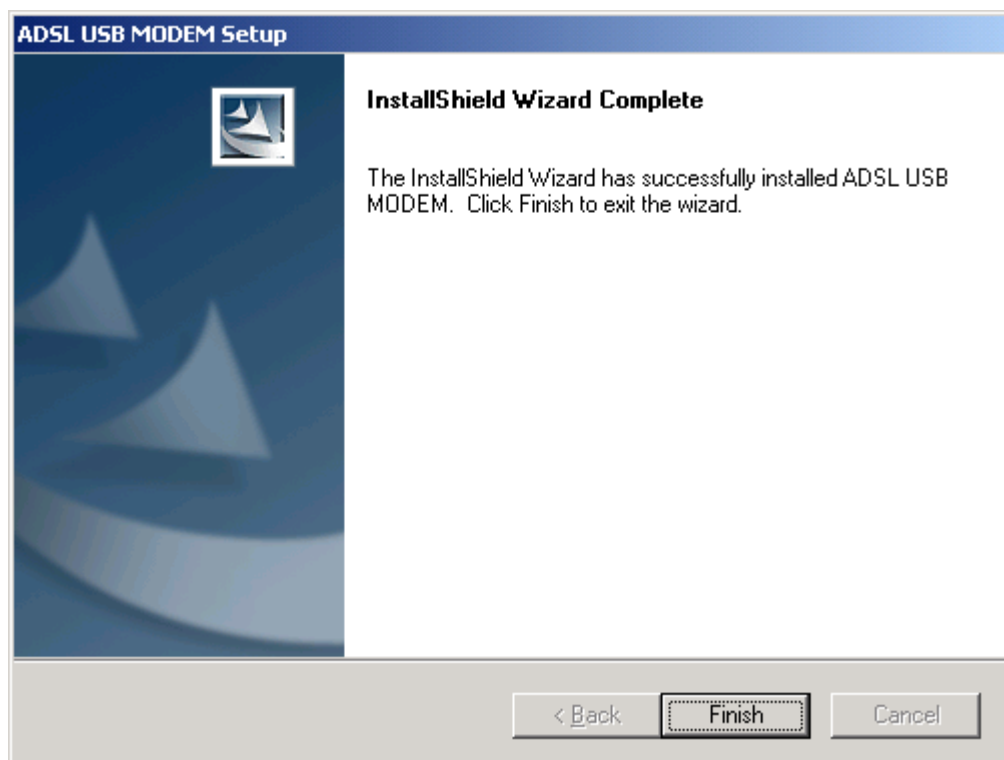
5. Please confirm the settings and click "**Next**" to continue.



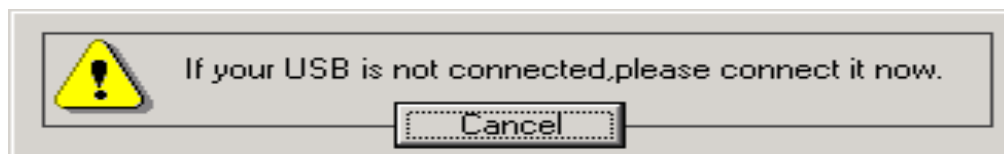
6. The wizard is processing the installation.



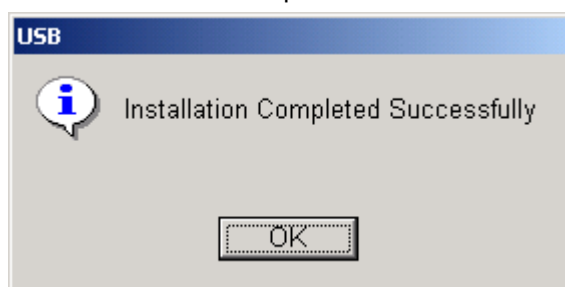
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



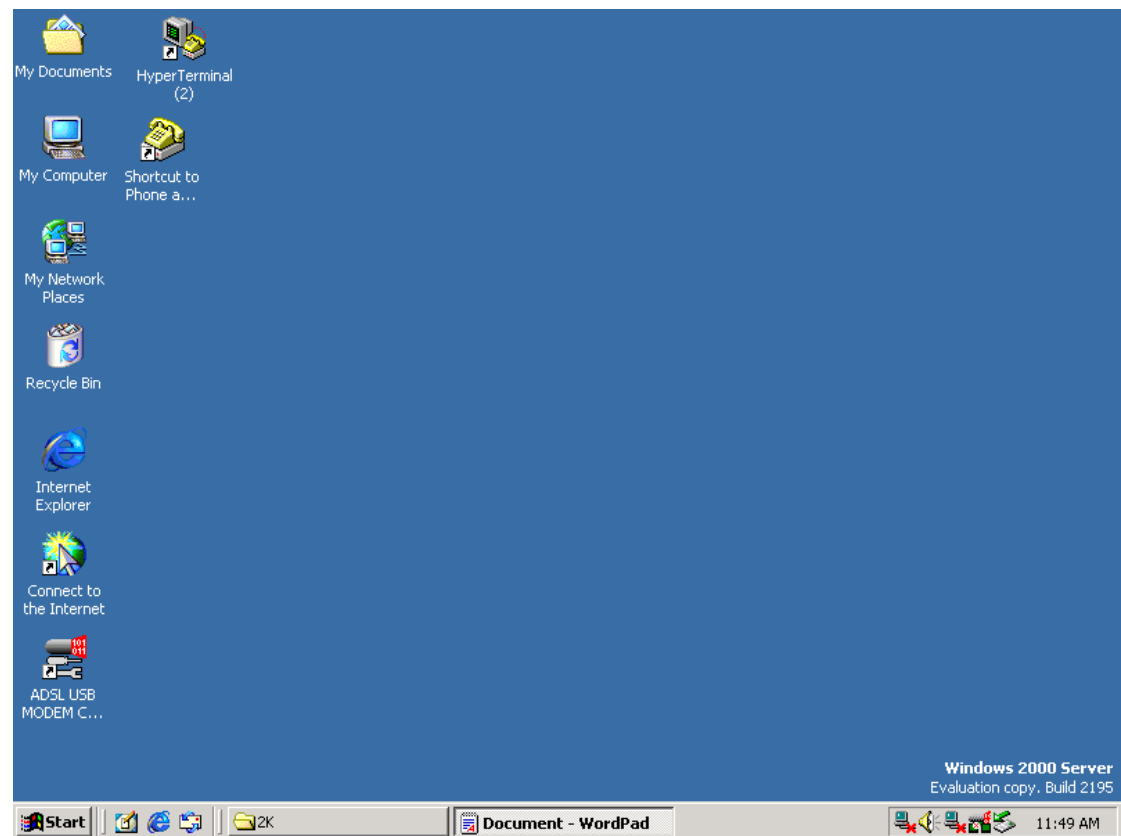
8. Connect USB ADSL MODEM into your computer.



9. Installation is complete. Click “**OK**”.

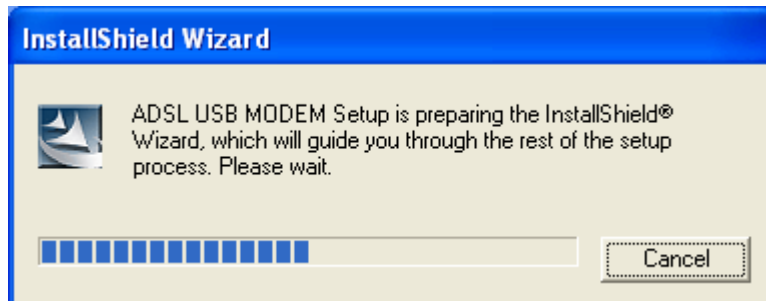


10. The shortcut of USB ADSL MODEM icon will display on the desktop.

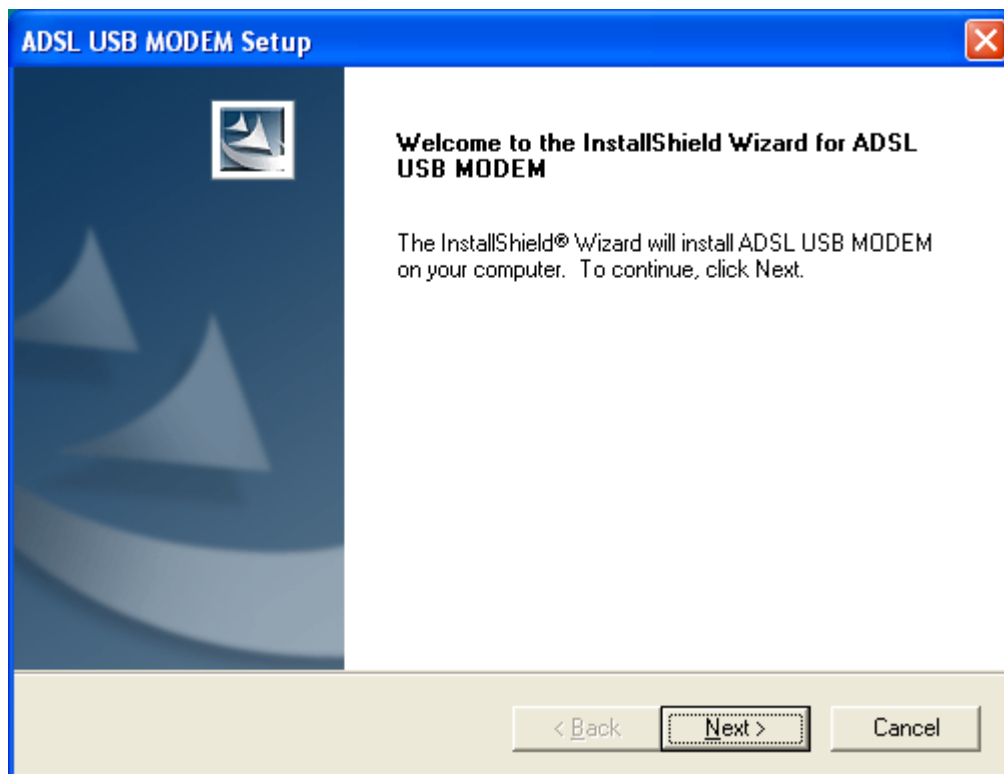


Windows XP

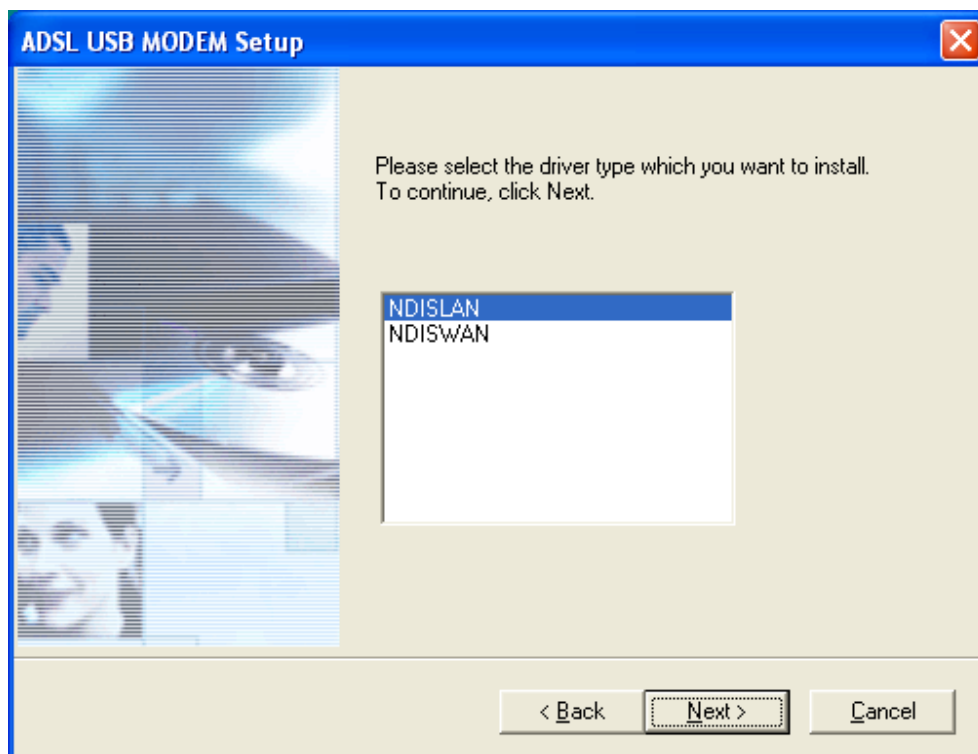
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



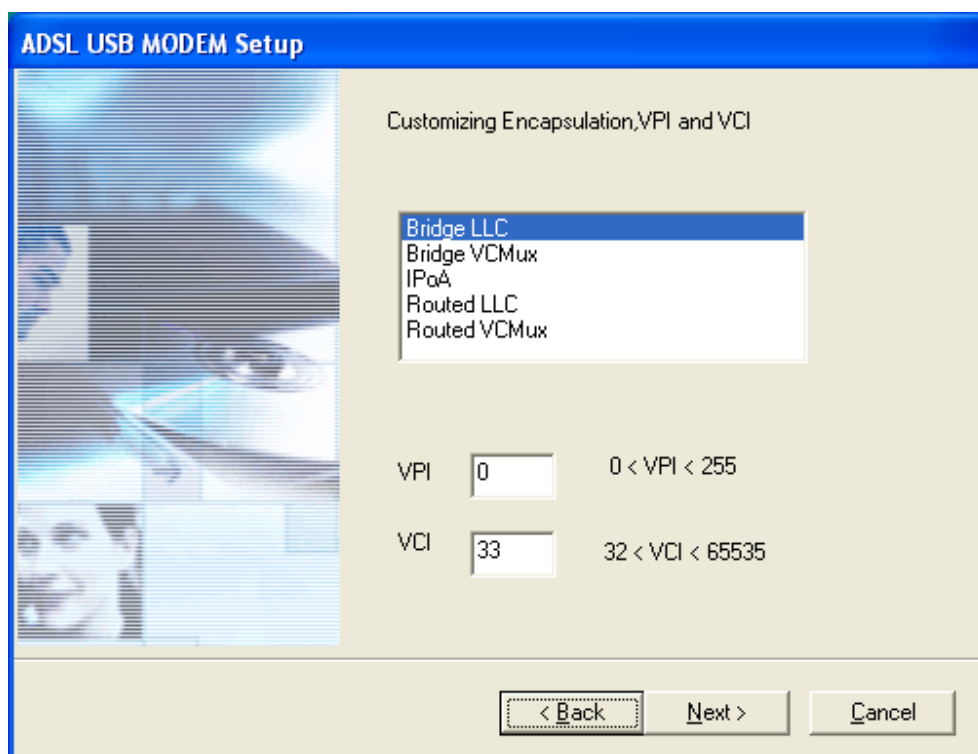
2. The install wizard is ready to install the driver. Click “**Next**” to continue.



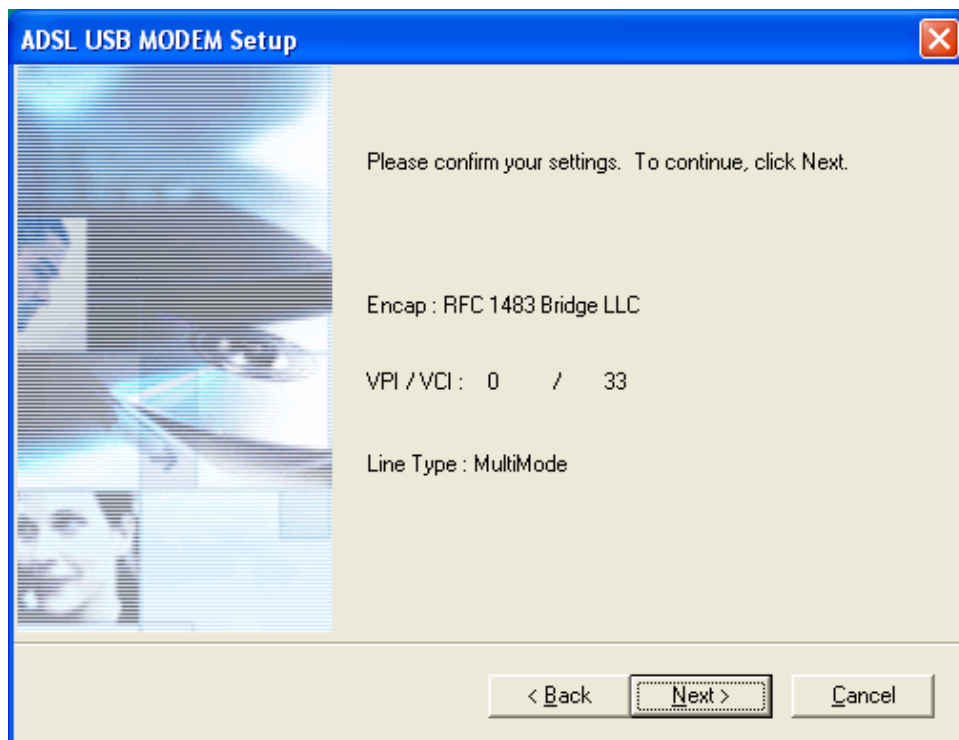
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click **“Next”** to continue.



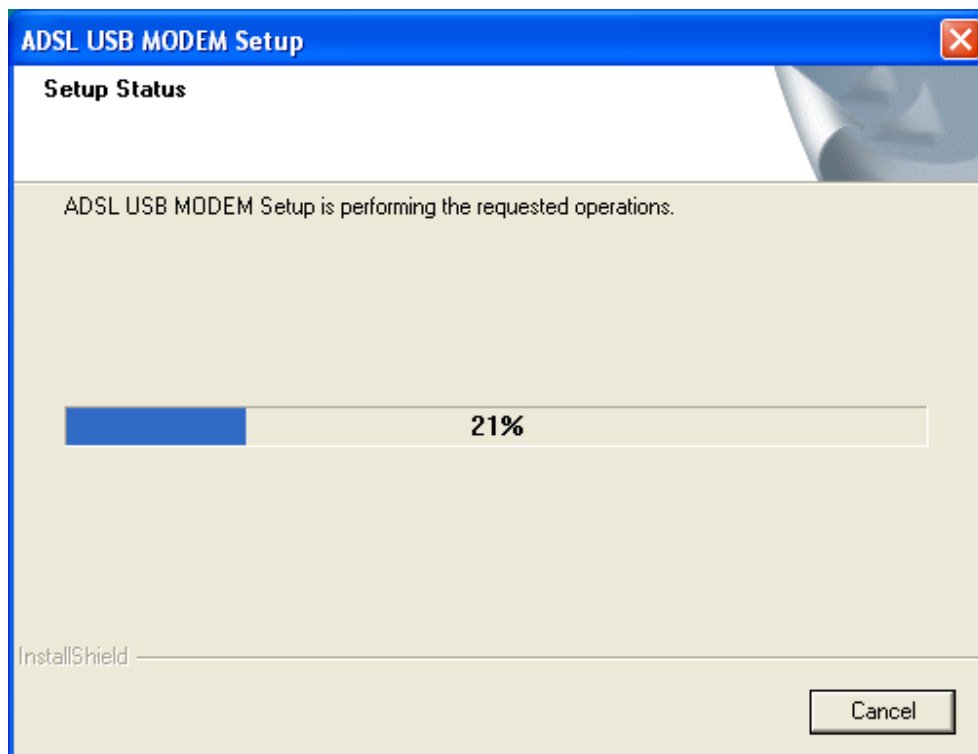
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click **“Next”**.



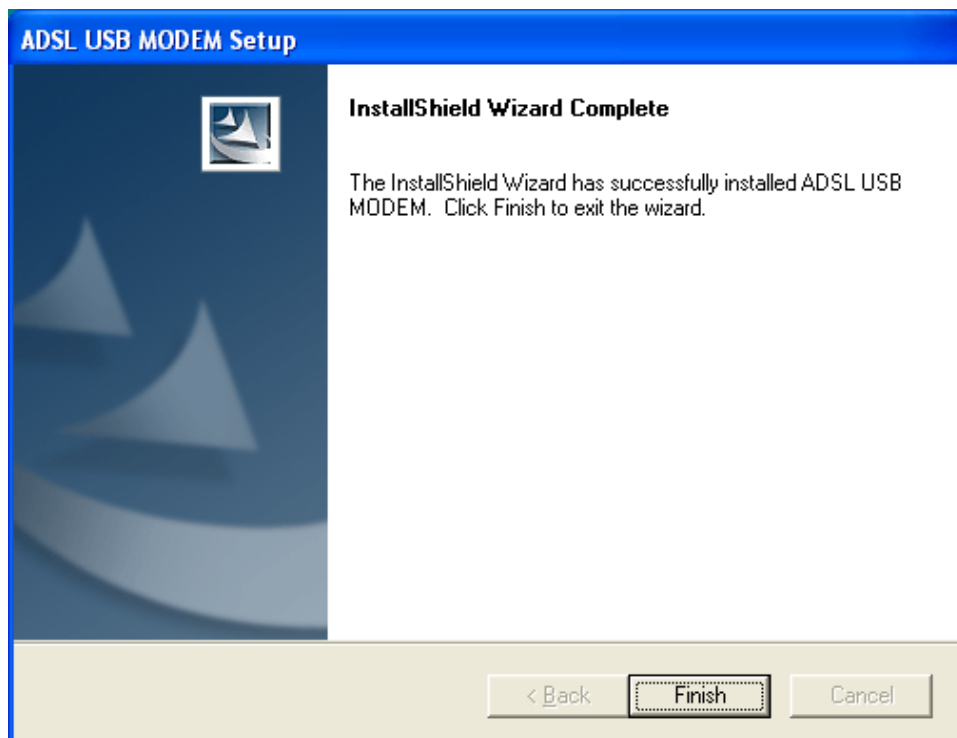
5. Please confirm the settings and click "**Next**" to continue.



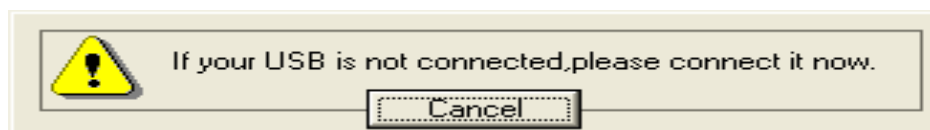
6. The wizard is processing the installation.



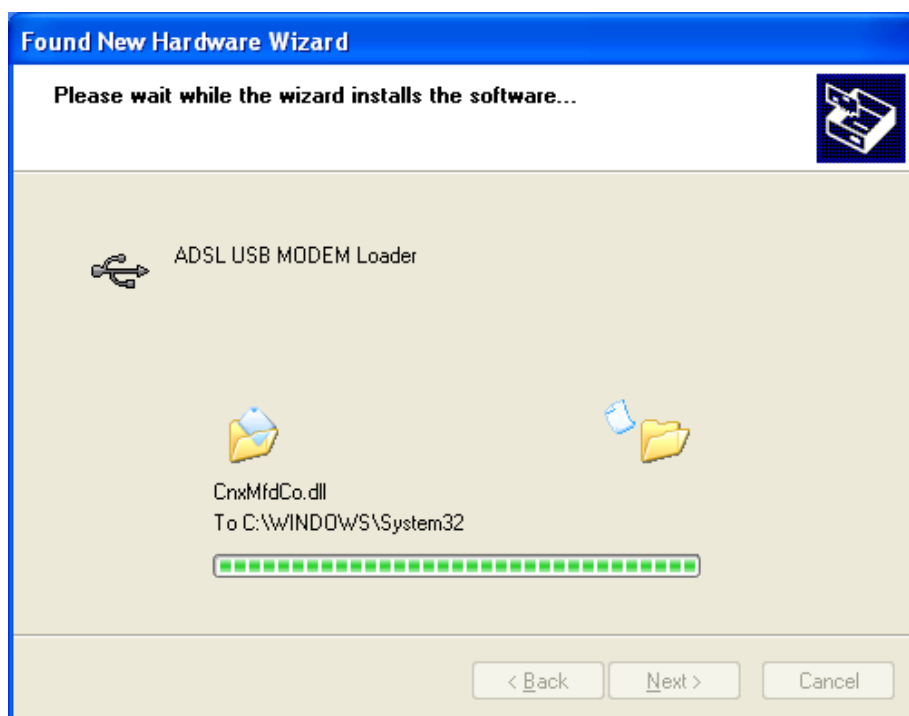
7. The driver has been installed successfully. Click **“Finish”** to exit the wizard.



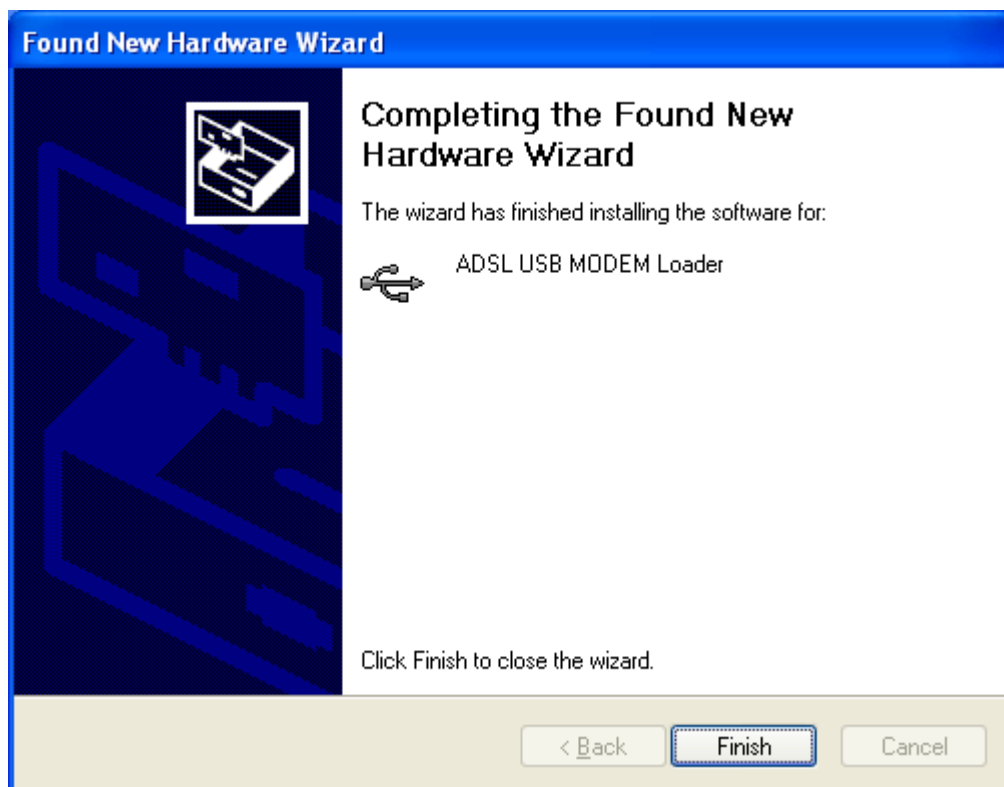
8. Connect USB ADSL MODEM into your computer.



9. **“Found New Hardware Wizard”** dialog box appears. The wizard will detect and install the driver. Click **“Next”** to continue.



10. Installation is complete. Click **Finish**.



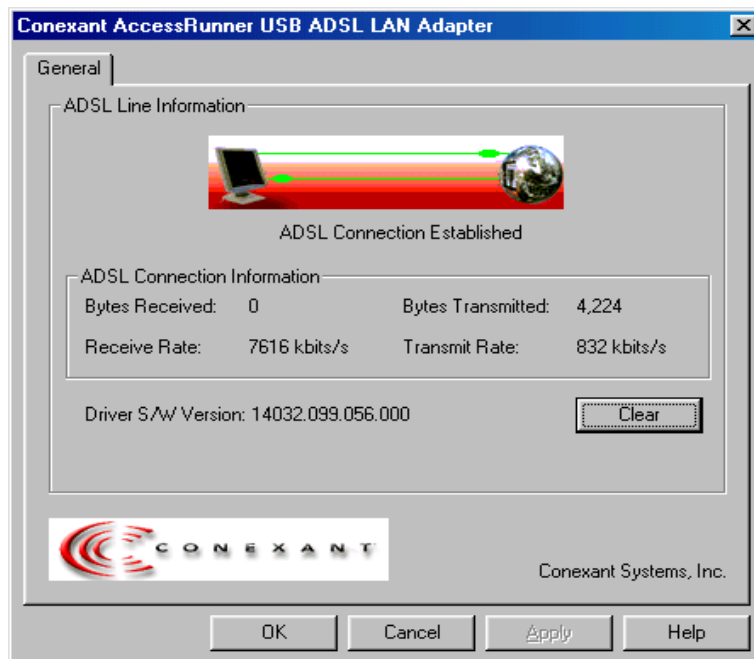
11. The shortcut of USB ADSL MODEM icon will display on the desktop.



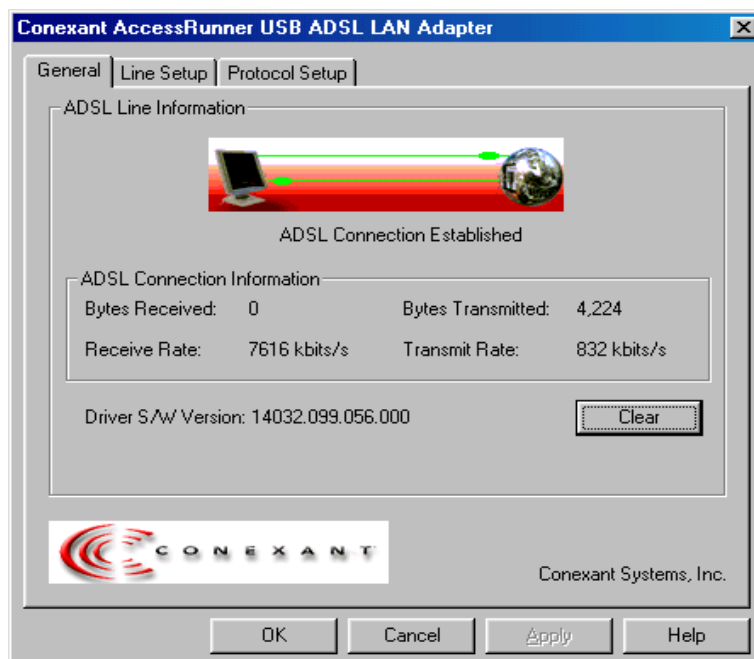
Configuration Your ADSL Modem Networking Settings -- LAN Setting the Configuration to RFC 1483/1577/2225/2684

Windows 98 FE / 98 SE/ME/2000/XP

1. After your PC has rebooted, double-click **AccessRunner ADSL** icon on desktop.
2. It will display the **Conexant AccessRunner USB ADSL LAN Adapter** dialog box.



3. You can click a hot-key < **Alt+C** > to open the Advance Table directly. Then General / Line Setup / Protocol Setup Table will display.



4. Select **Line Setup** table. Then choose Modulation supported by your ADSL provider.

The screenshot shows the 'Line Setup' tab of the 'Conexant AccessRunner USB ADSL LAN Adapter' configuration window. The window has three tabs: 'General', 'Line Setup', and 'Protocol Setup'. The 'Line Setup' tab is active. It contains four dropdown menus: 'Modulation' (set to 'Automatic, ITU G.dmt or G.lite preferred'), 'Wiring Selection' (set to 'Line Tip/Ring'), 'ADSL Head End' (set to 'Alcatel Network Systems Inc.'), and 'ADSL Head End Env.' (set to 'Non-Specific'). At the bottom are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

5. Select the **Protocol Setup** table and edit the VPI, VCI and Encapsulation Mode.

The screenshot shows the 'Protocol Setup' tab of the 'Conexant AccessRunner USB ADSL LAN Adapter' configuration window. The window has three tabs: 'General', 'Line Setup', and 'Protocol Setup'. The 'Protocol Setup' tab is active. It contains two main sections: 'ATM Virtual Circuit Identification' and 'Aggregate Channel Setup'. The 'ATM Virtual Circuit Identification' section has two columns for 'Virtual Circuit 0' and 'Virtual Circuit 1'. Under 'Virtual Circuit 0', 'Virtual Path Identifier (VPI)' is 0 and 'Virtual Circuit Identifier (VCI)' is 35. Under 'Virtual Circuit 1', 'Virtual Path Identifier (VPI)' is 8 and 'Virtual Circuit Identifier (VCI)' is 43. The 'Aggregate Channel Setup' section has a dropdown for 'Encapsulation Mode' (set to 'Bridged IP over ATM LLC SNAP (RFC1483)'). Below it, 'Maximum Packet Length' is shown for 'Receive' (1500) and 'Transmit' (1500). To the right, 'Peak Cell Rate (PCR)' is set to 'Line Rate'. At the bottom are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

WAN Driver Installation

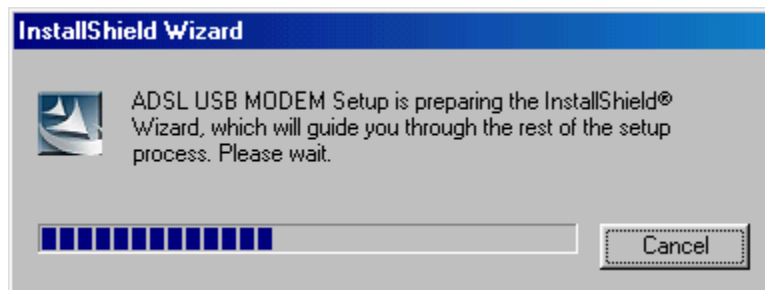
WAN mode: PPP over ATM (RFC-2364)

Support 3rd Party PPP over Ethernet (RFC-2516)

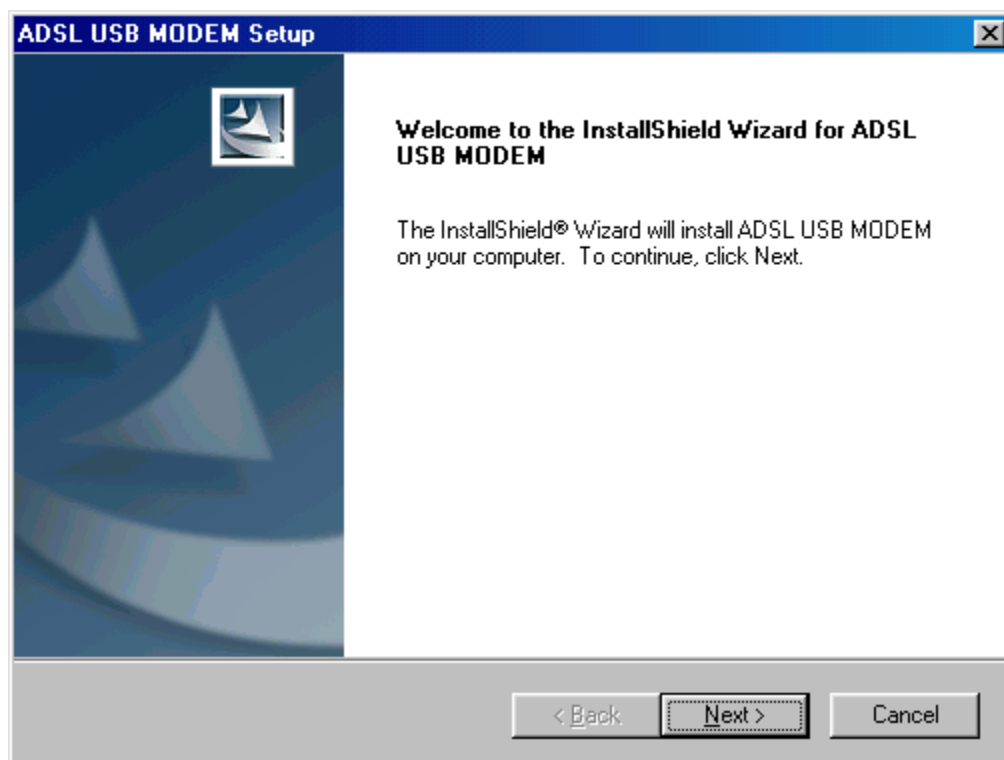
Notice: *Install the driver first. After the driver is installed, follow the instruction to connect USB ADSL Modem to the computer.*

Windows 98FE

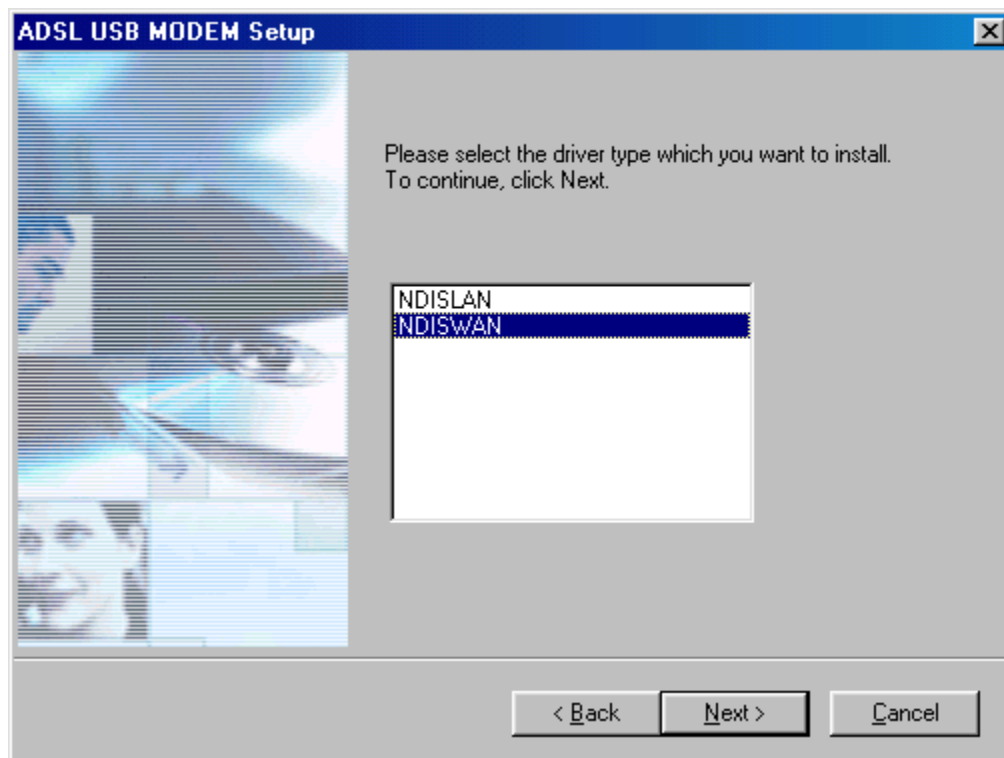
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



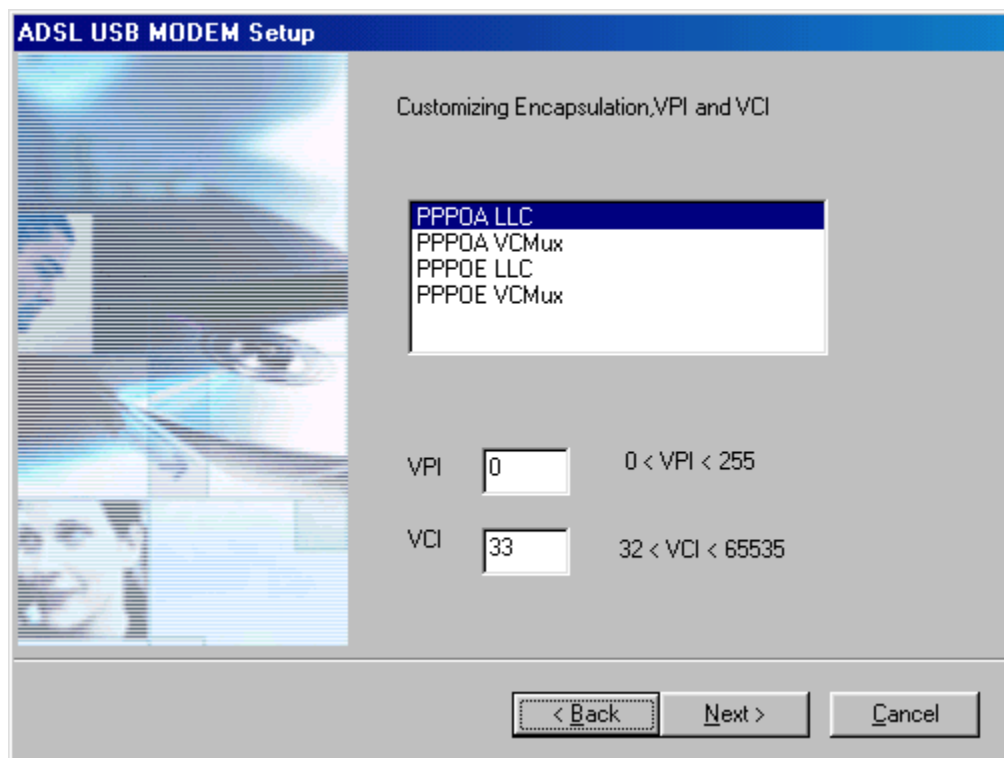
2. The install wizard is ready to install the driver. Click “**Next**” to continue.



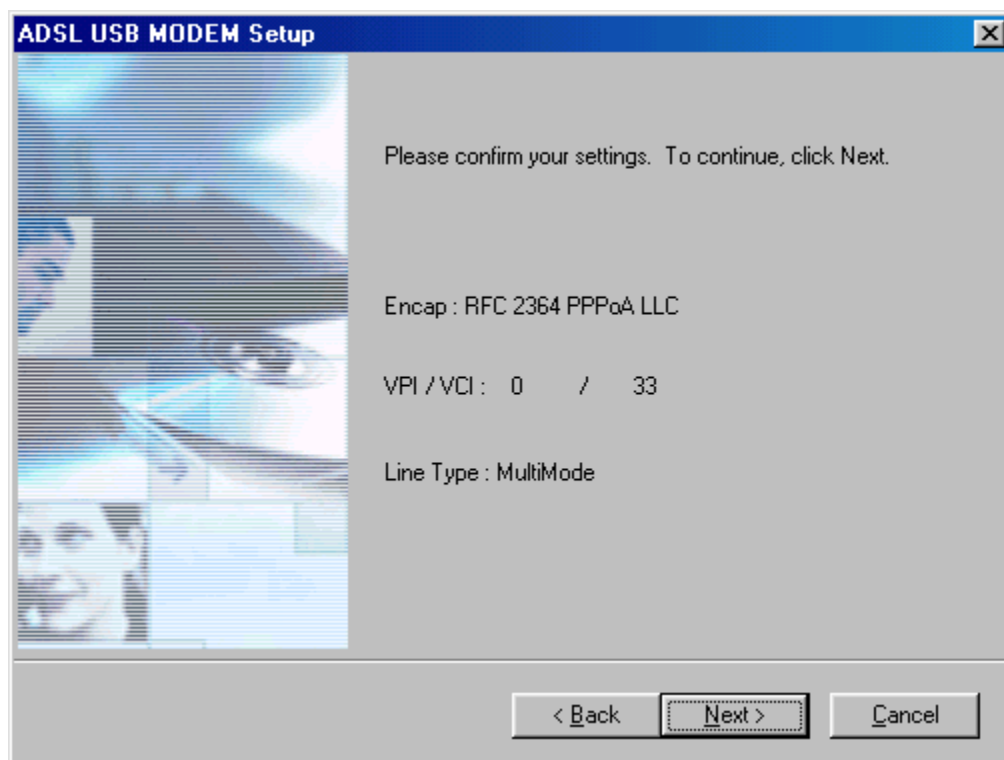
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click “**Next**” to continue.



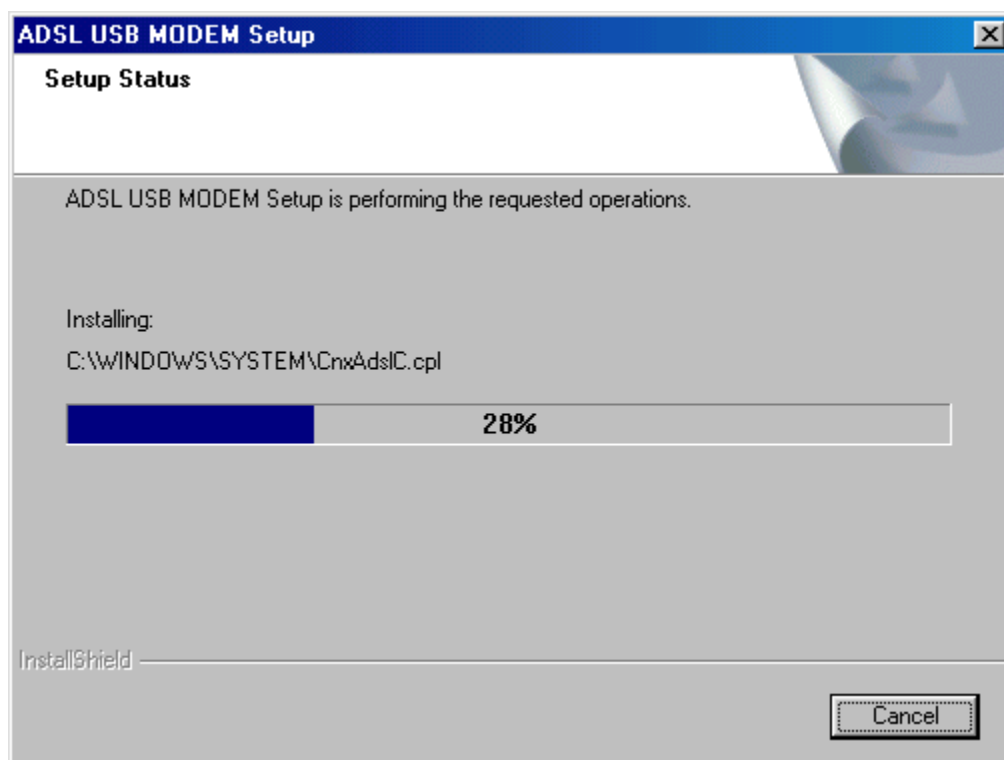
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click “**Next**”.



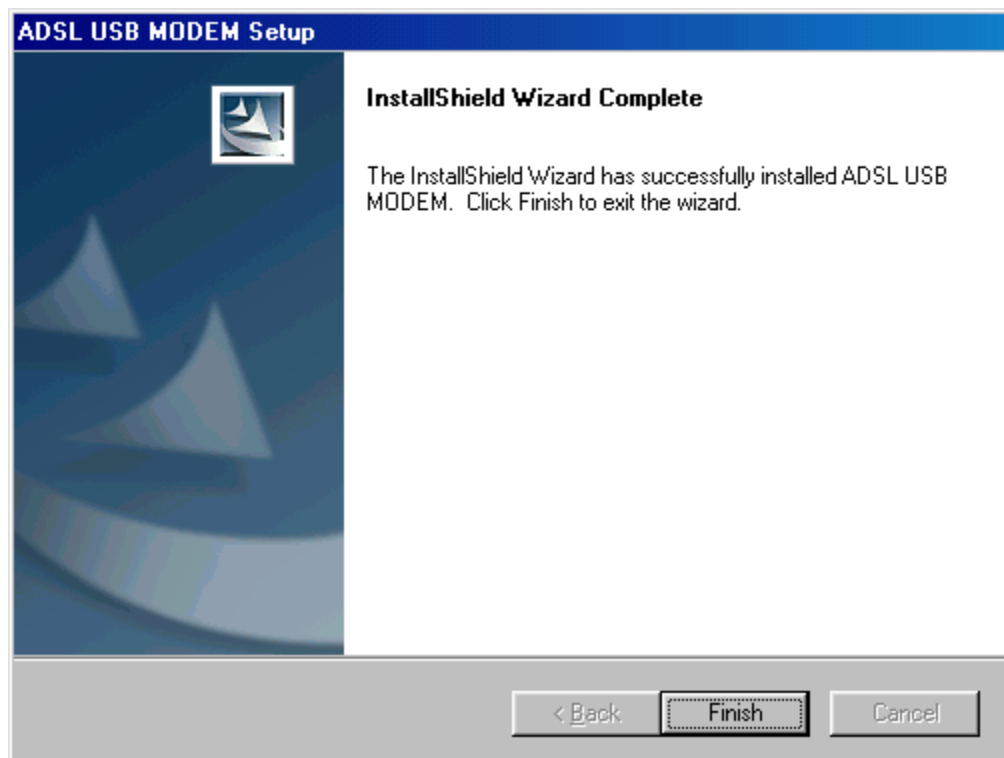
5. Please confirm the settings and click "**Next**" to continue.



6. The wizard is processing the installation.



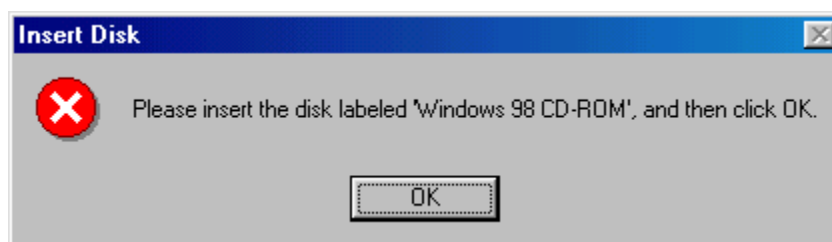
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



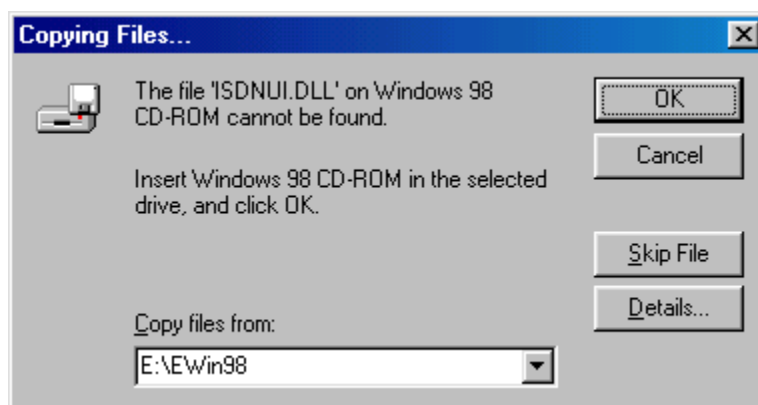
8. Connect USB ADSL MODEM into your computer.

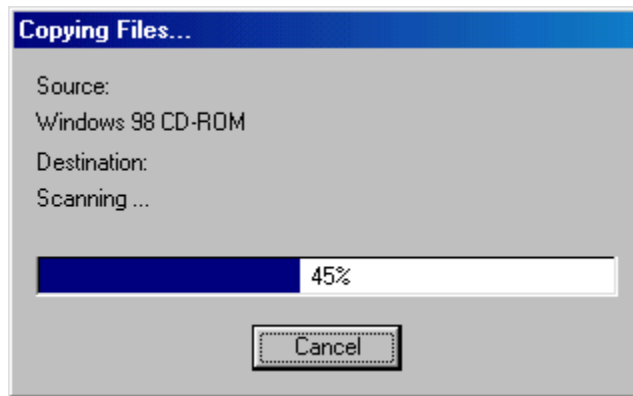


9. Insert Windows 98 CD-ROM disk and click “**OK**” to continue.

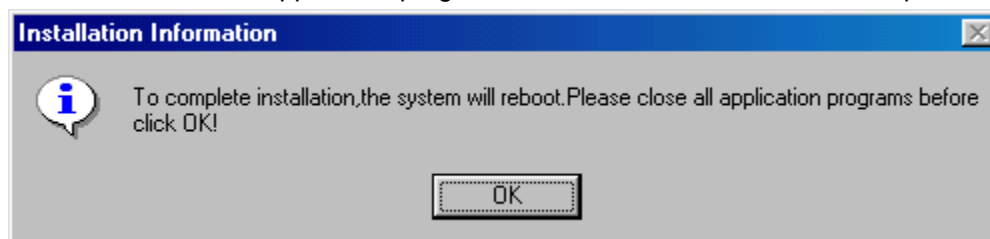


10. Specify Windows 98 CD-ROM disk location (ex. E:\Ewin98). Then click “**OK**” to continue.

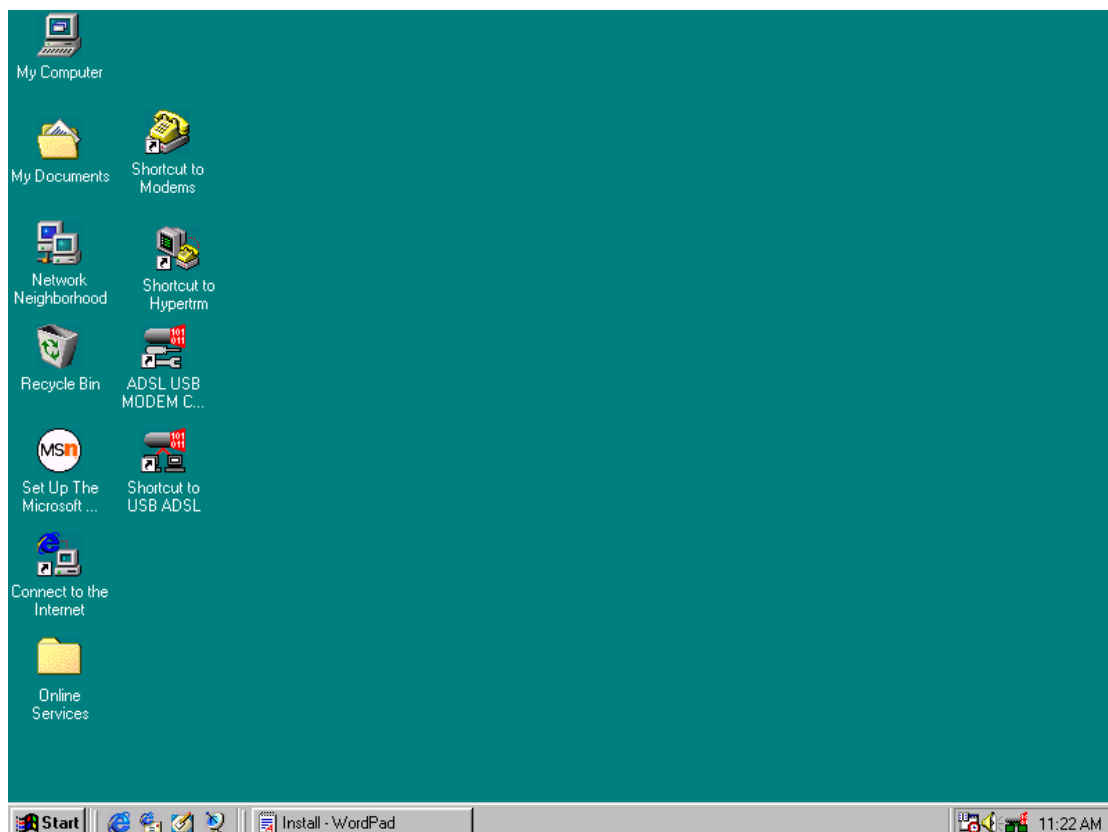




11. Please close all application programs and click **“OK”** to reboot the computer.

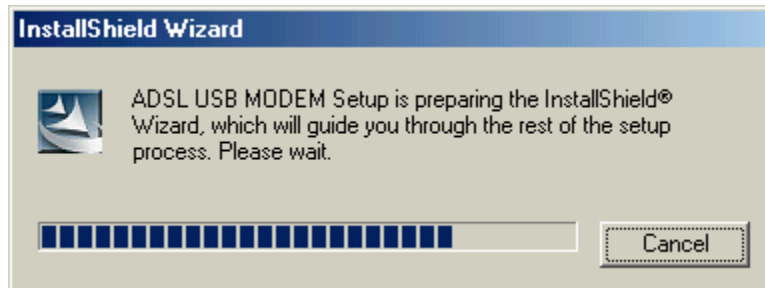


12. The shortcut of USB ADSL MODEM icon will display on the desktop.

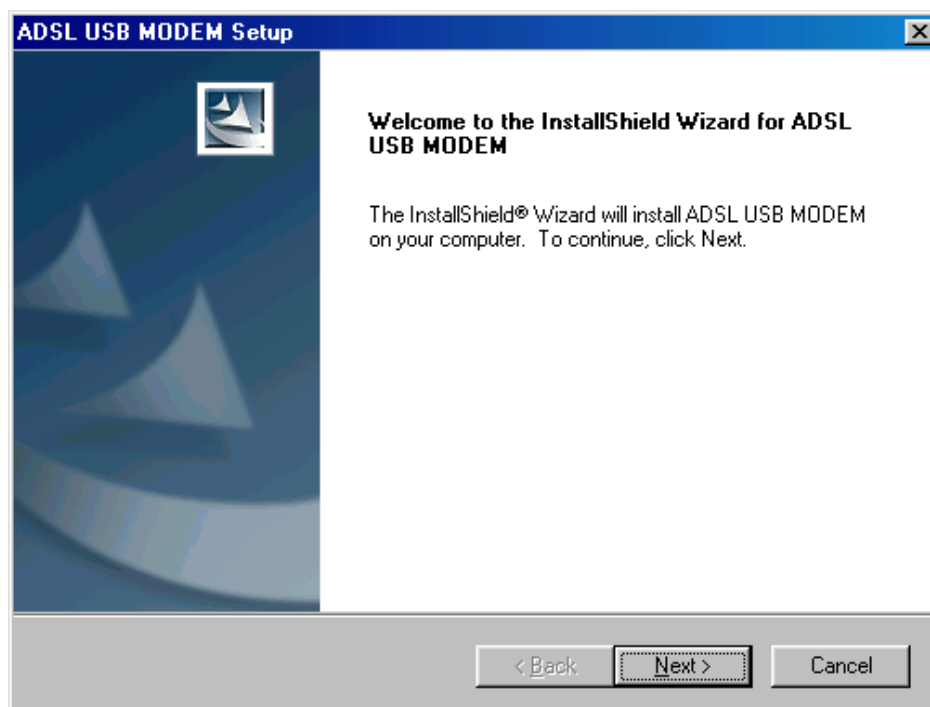


Windows 98SE

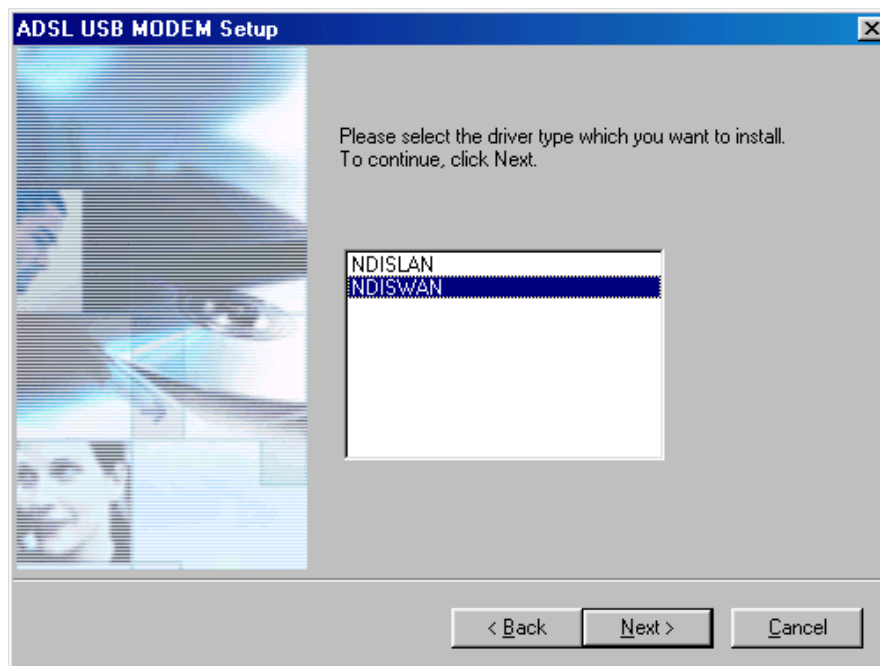
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



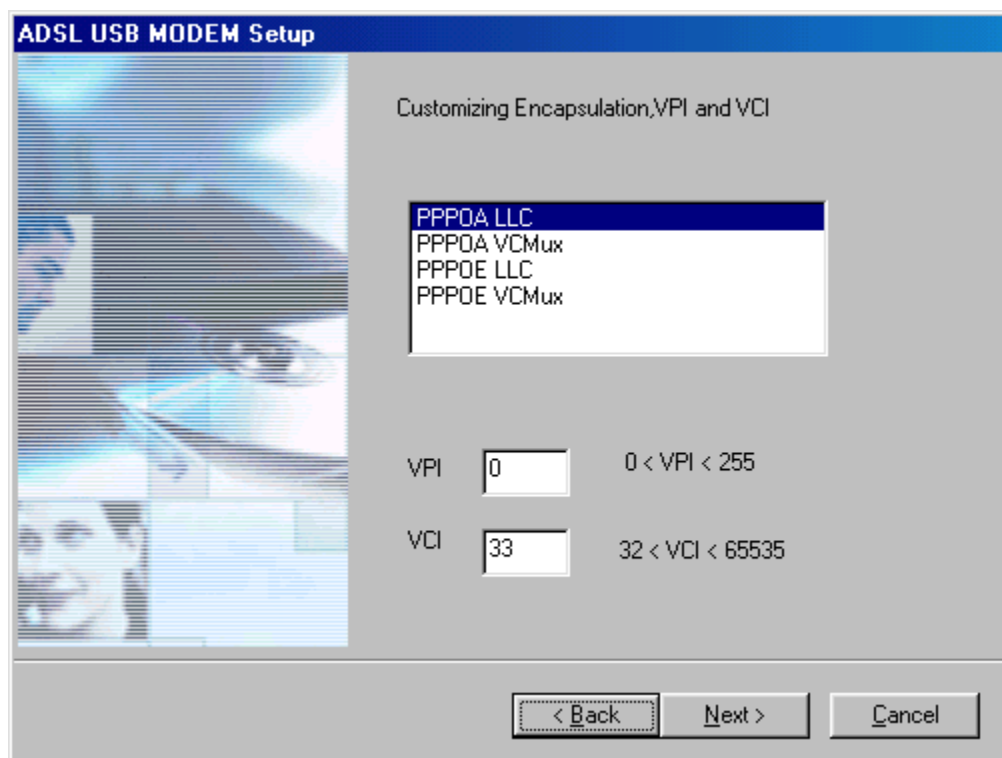
2. The install wizard is ready to install the driver. Click “**Next**” to continue.



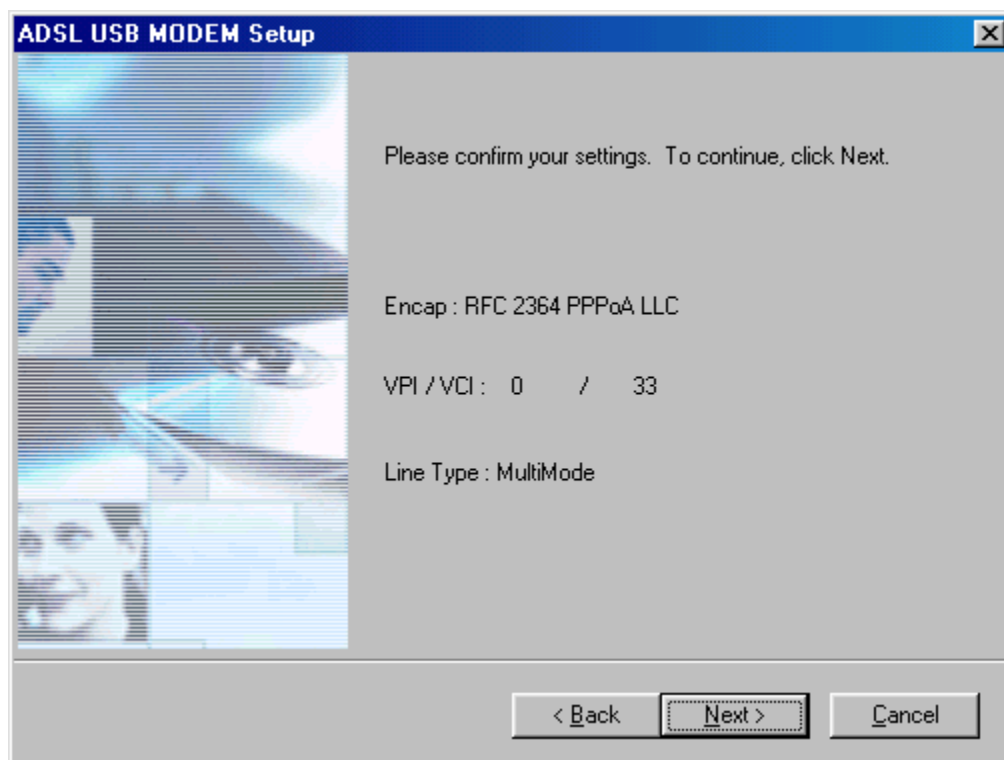
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click “**Next**” to continue.



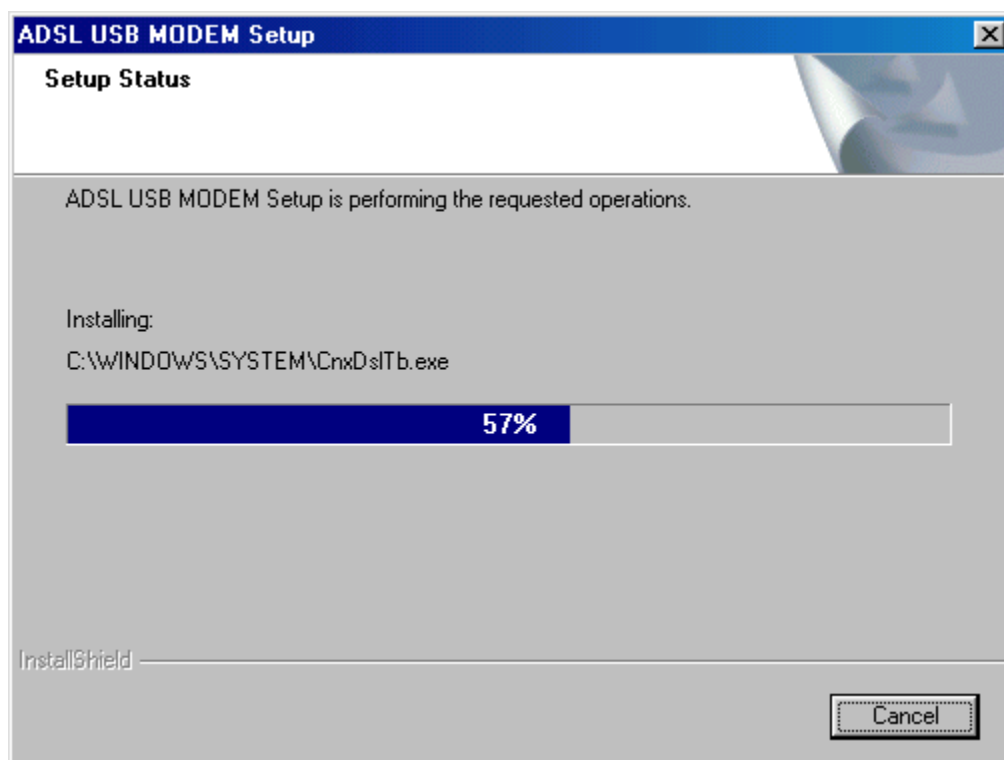
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click “**Next**”.



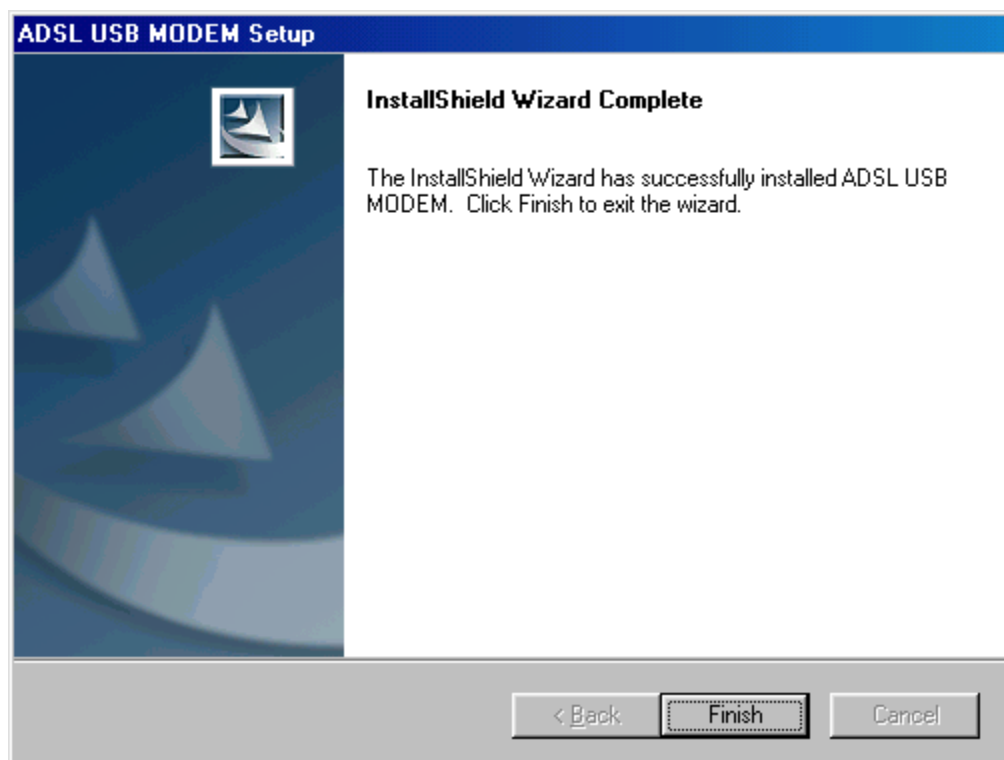
5. Please confirm the settings and click "**Next**" to continue.



6. The wizard is processing the installation



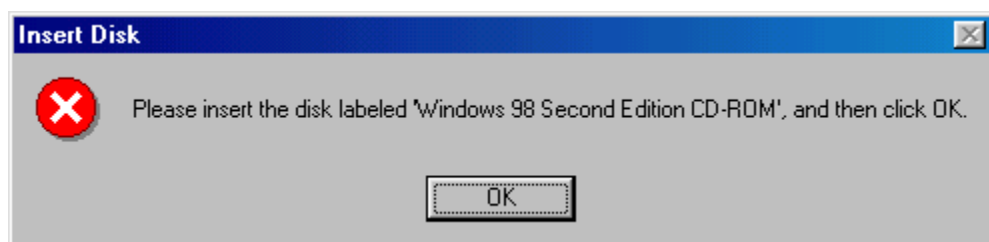
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard



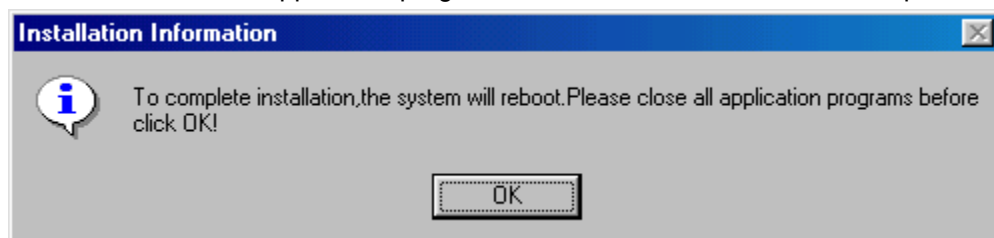
8. Connect USB ADSL MODEM into your computer



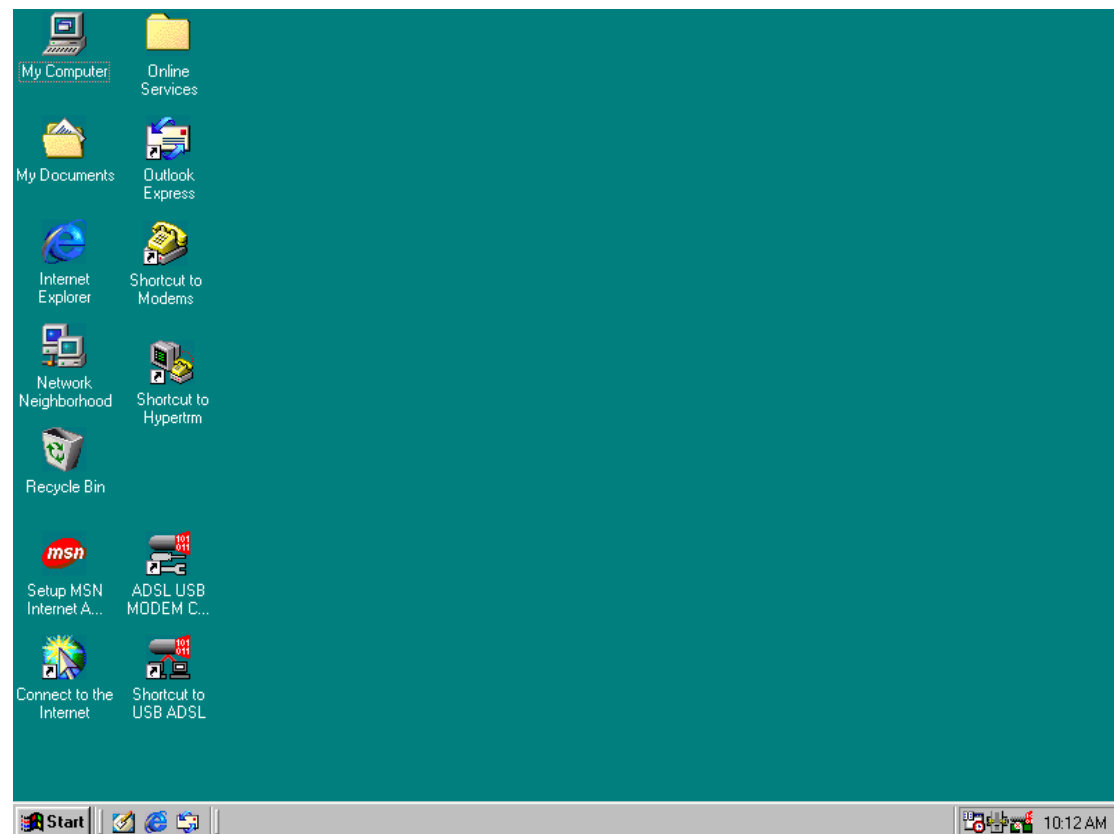
9. Insert Windows 98 Second Edition CD-ROM disk and click “**OK**” to continue.



10. Please close all application programs and click “**OK**” to reboot the computer.

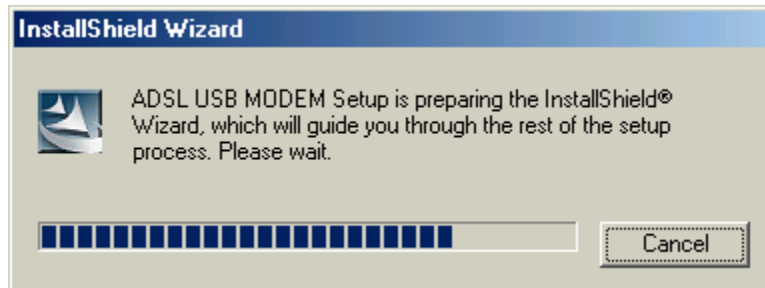


11. The shortcut of USB ADSL MODEM icon will display on the desktop.

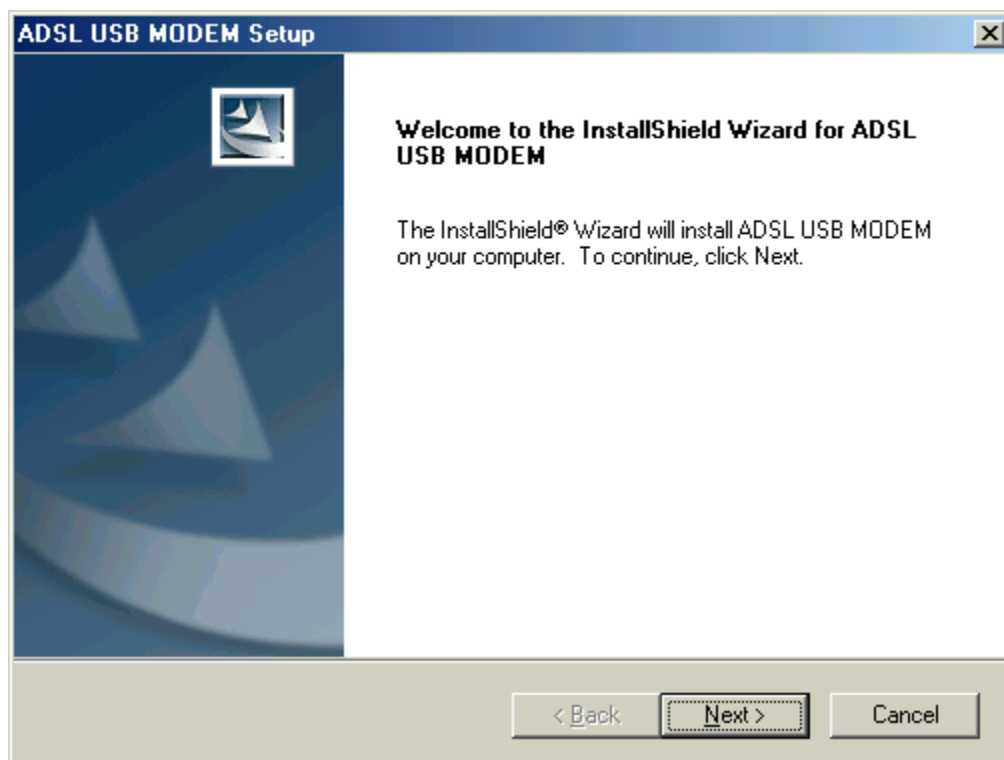


Windows ME

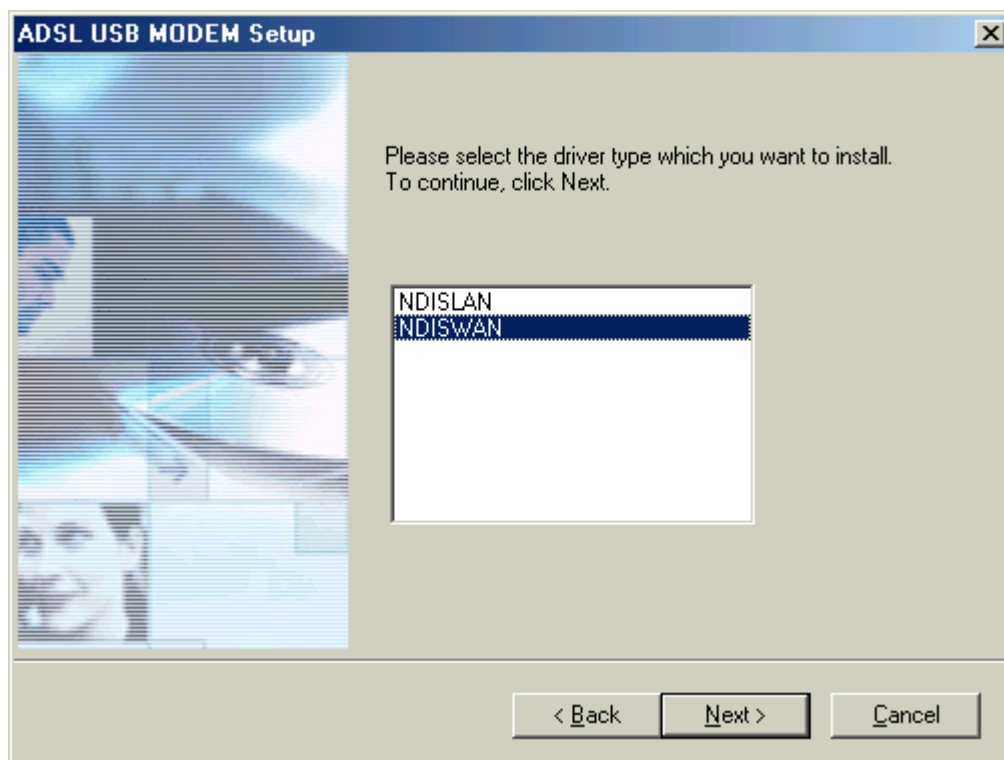
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



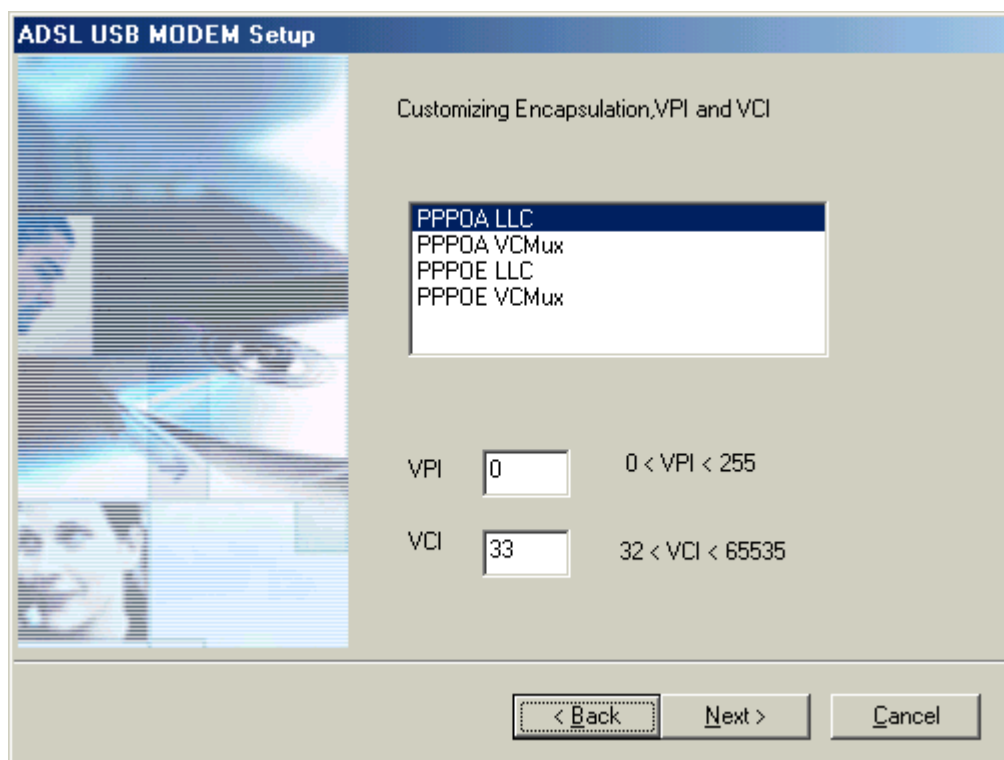
2. The install wizard is ready to install the driver. Click "**Next**" to continue.



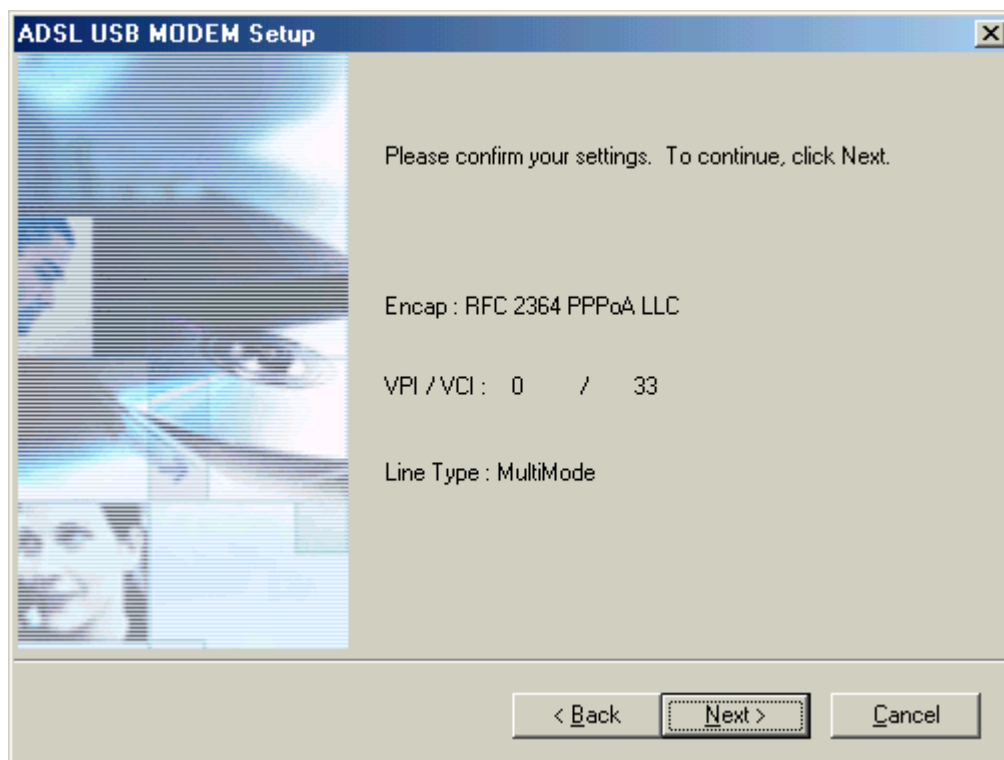
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click **“Next”** to continue.



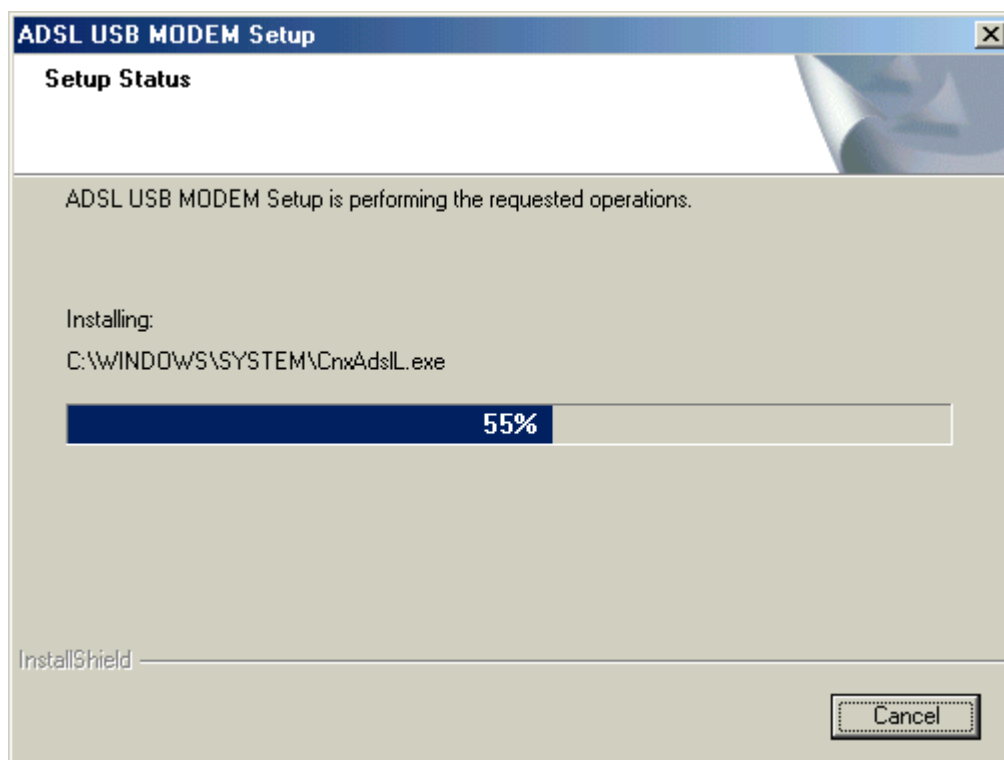
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click **“Next”**.



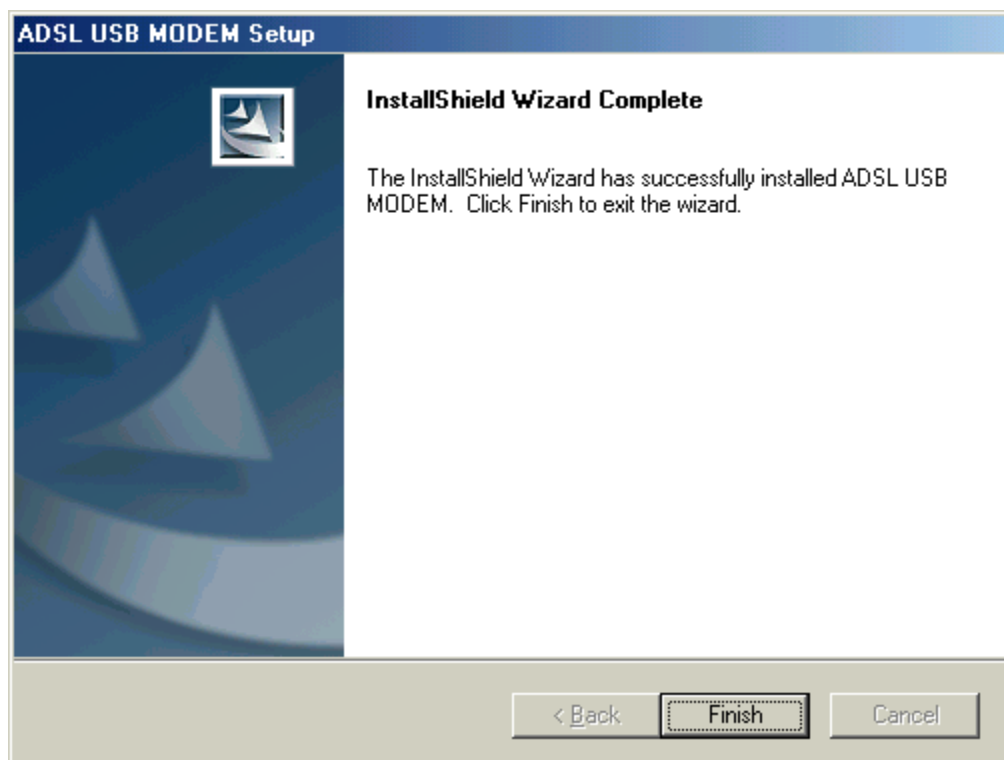
5. Please confirm the settings and click "**Next**" to continue.



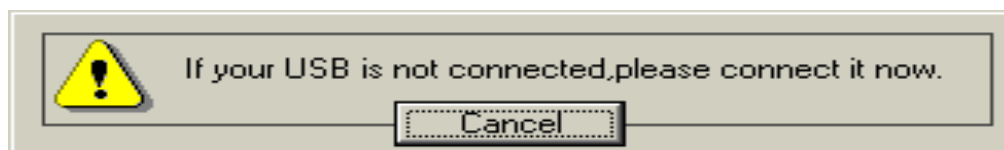
6. The wizard is processing the installation.



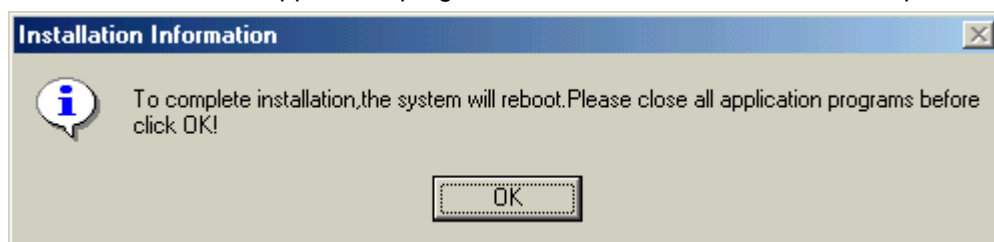
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



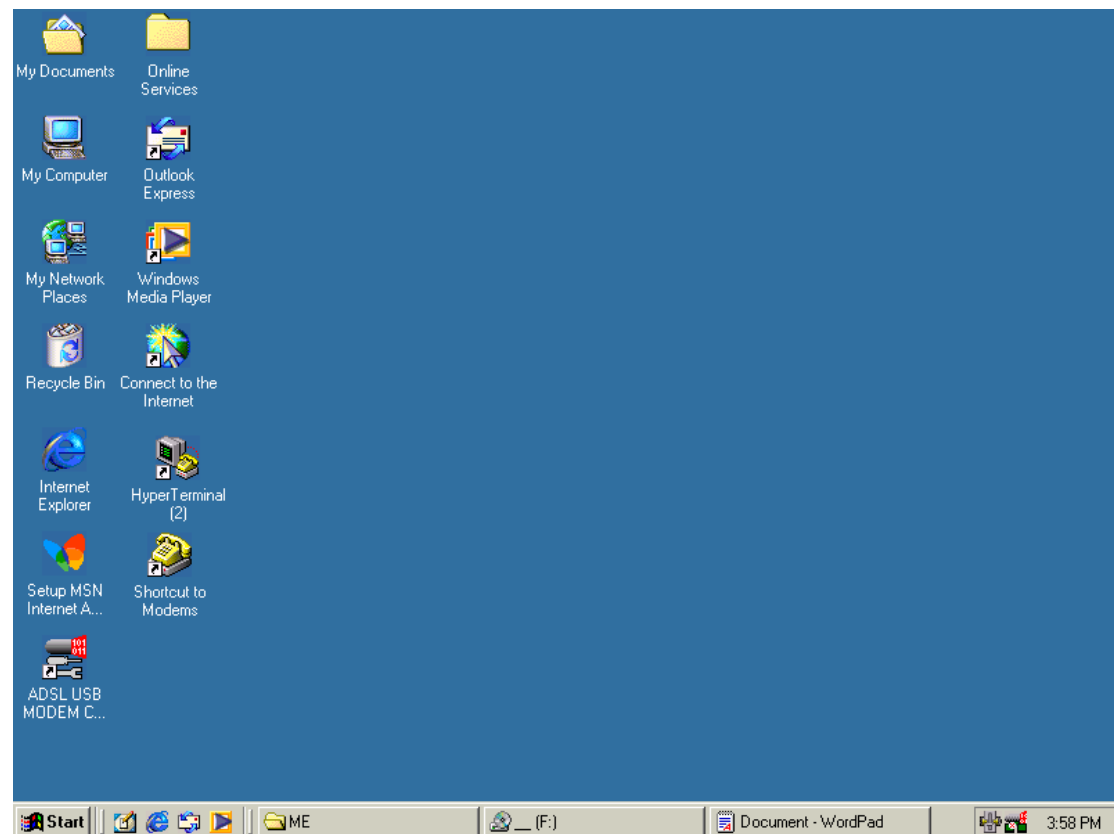
8. Connect USB ADSL MODEM into your computer.



9. Please close all application programs and click “**OK**” to reboot the computer.

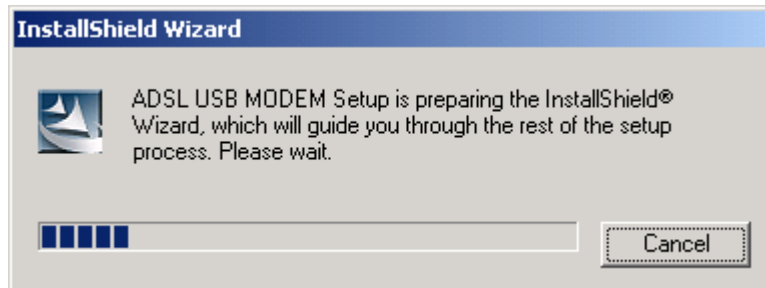


10. The shortcut of USB ADSL MODEM icon will display on the desktop.

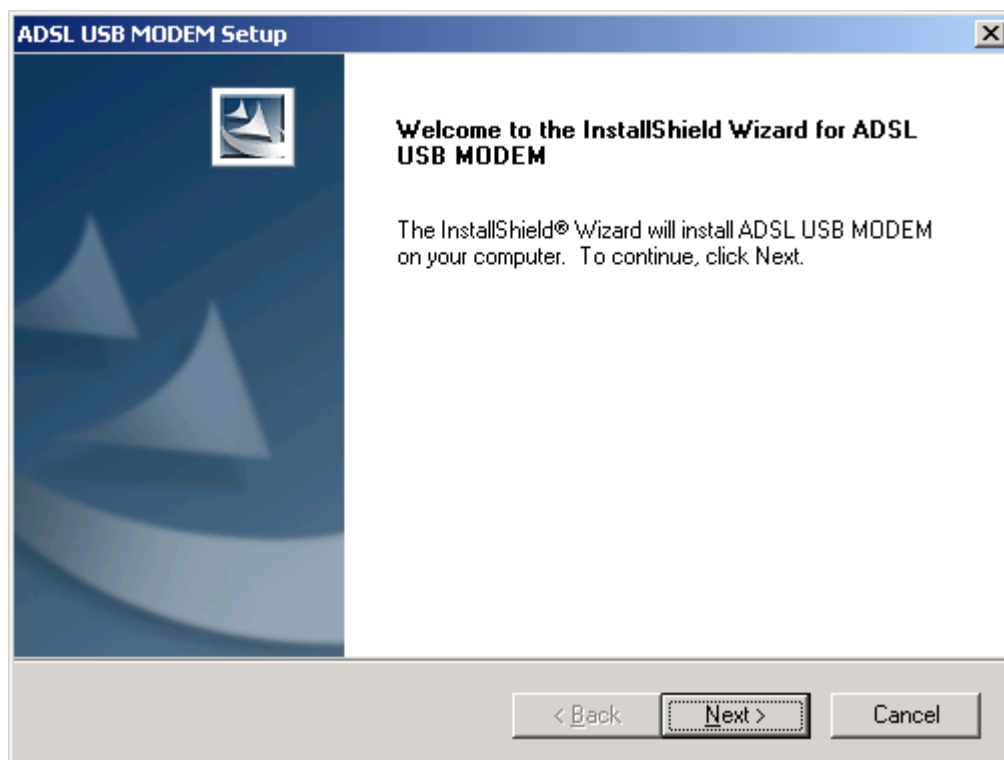


Windows 2000

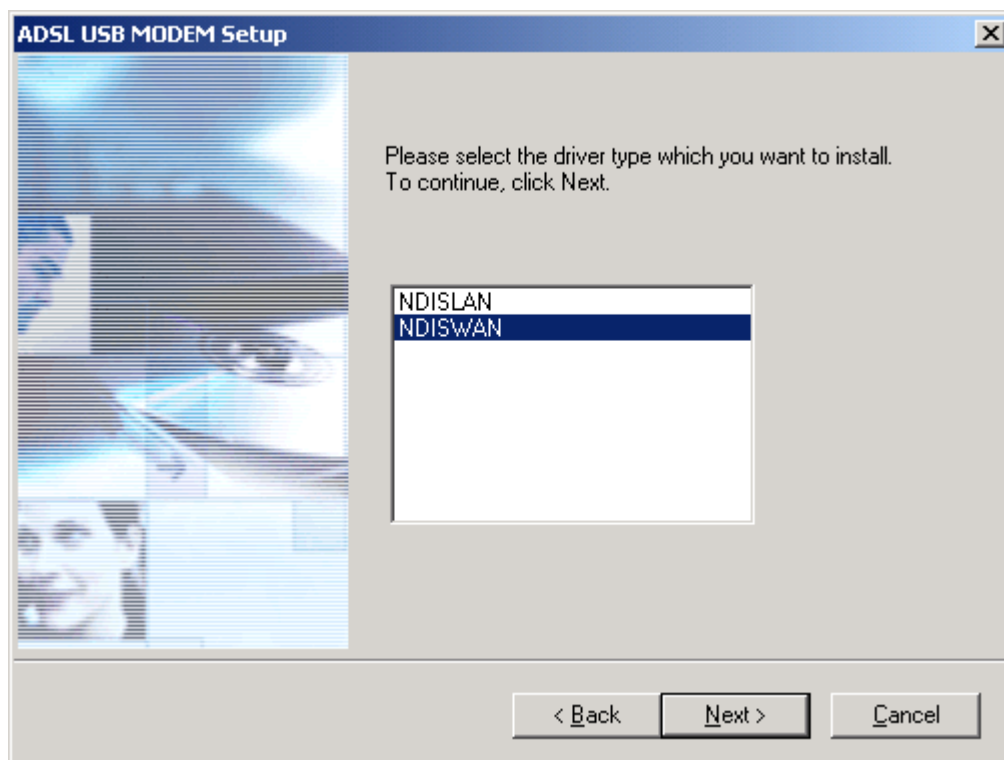
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



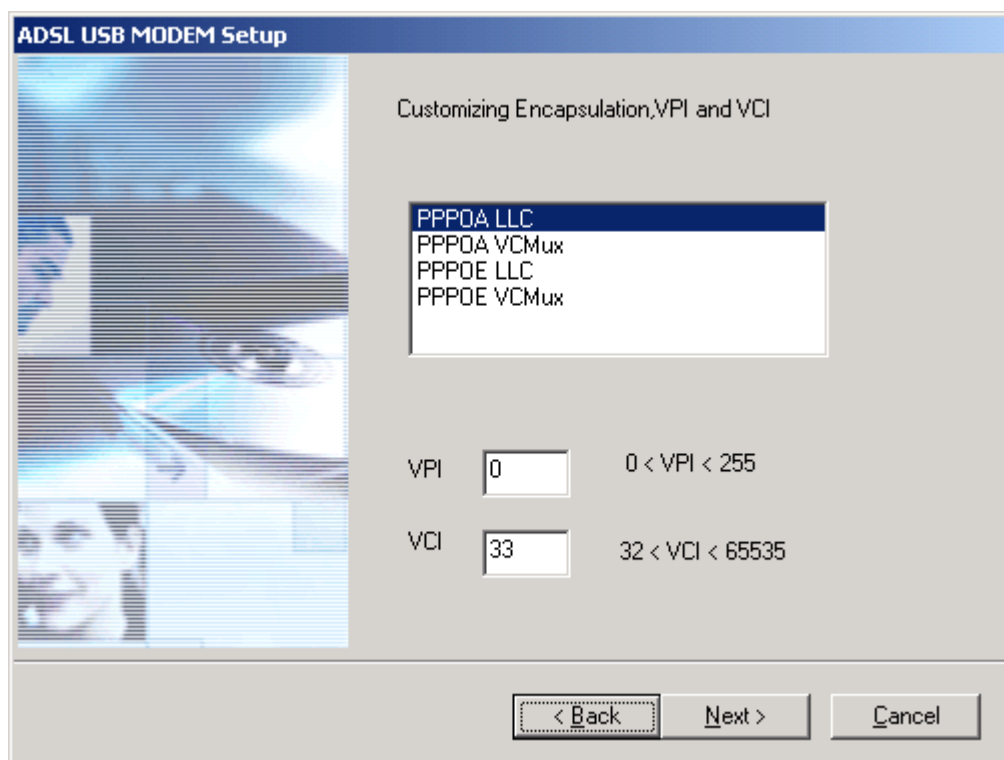
2. The install wizard is ready to install the driver. Click “**Next**” to continue.



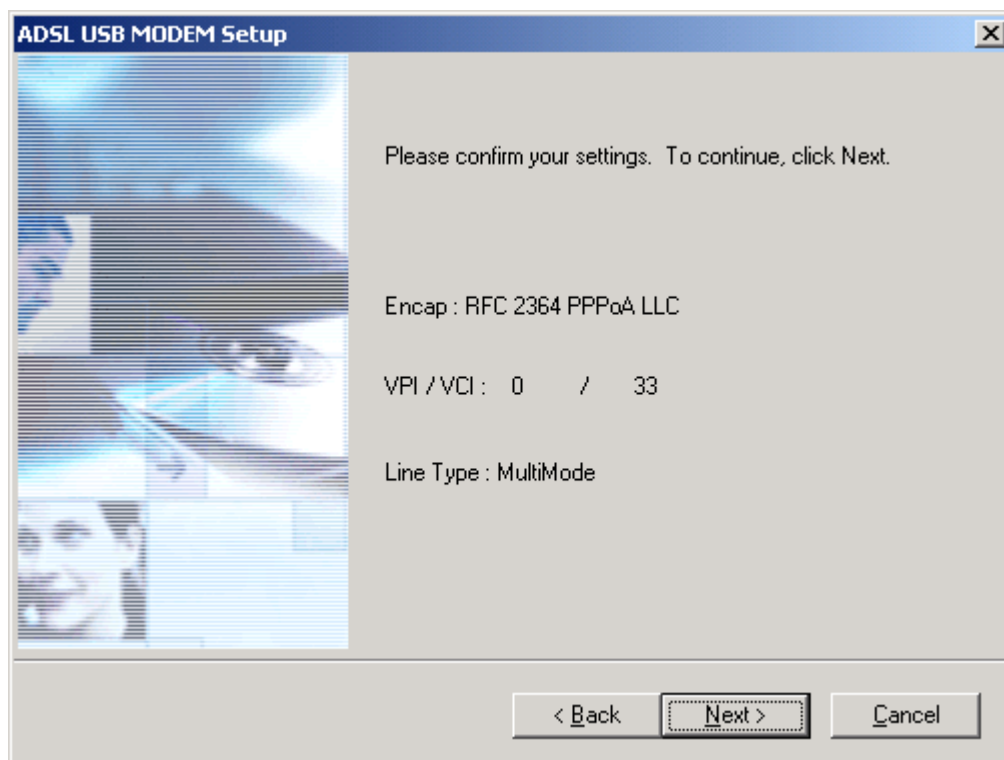
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click “**Next**” to continue.



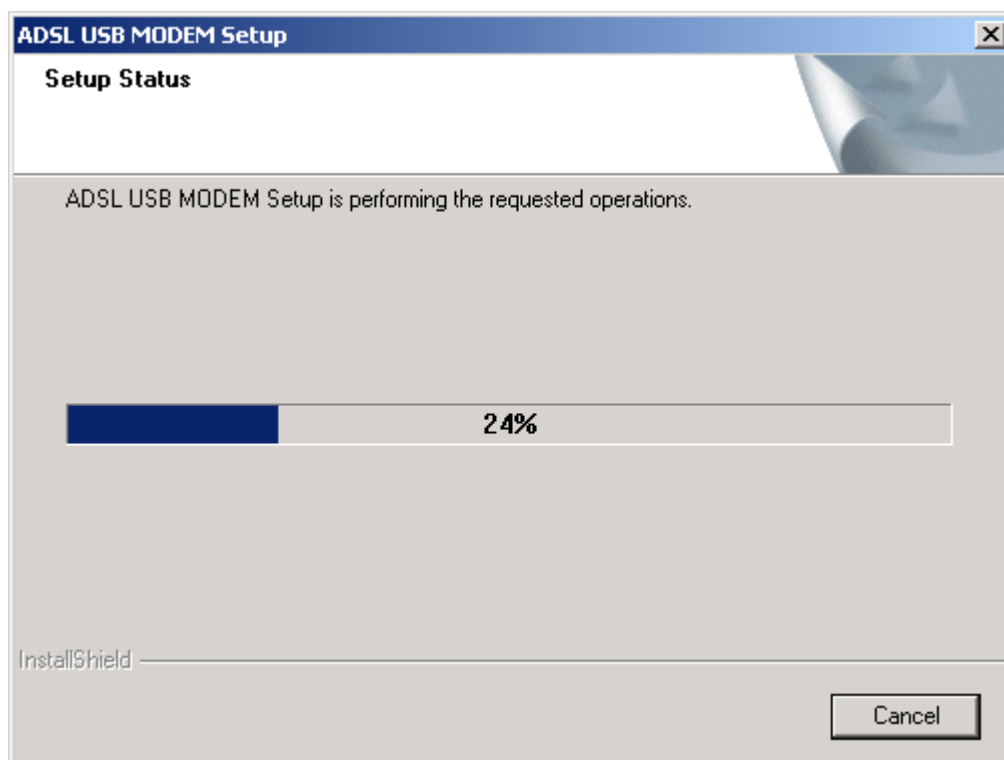
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click “**Next**”.



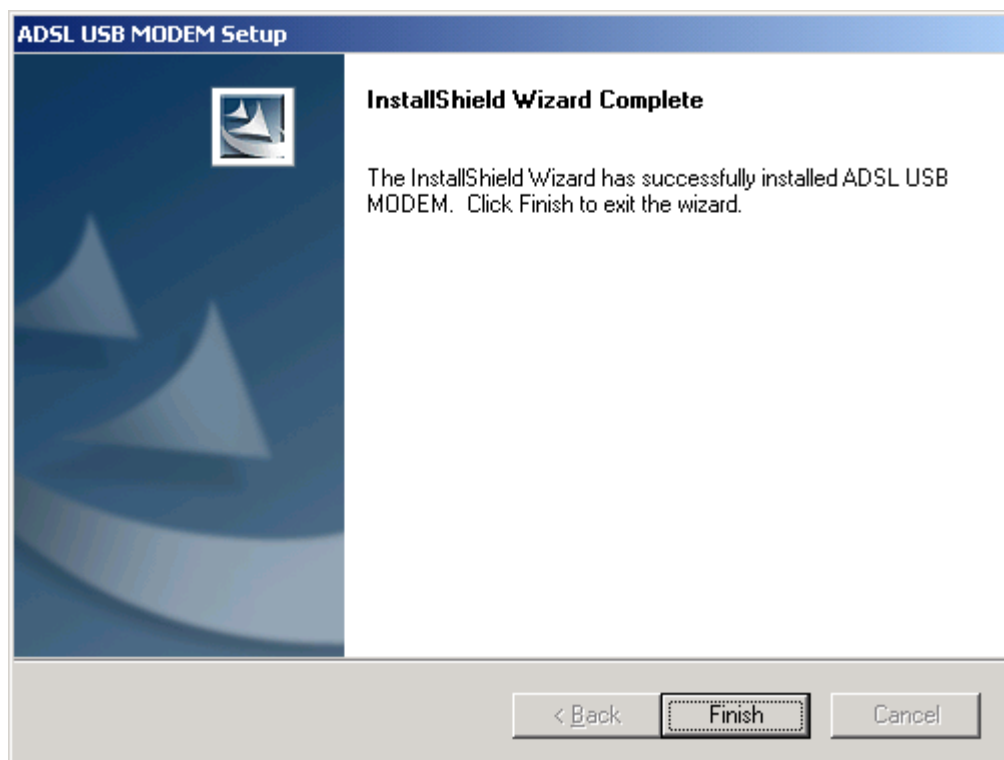
5. Please confirm the settings and click "**Next**" to continue.



6. The wizard is processing the installation.



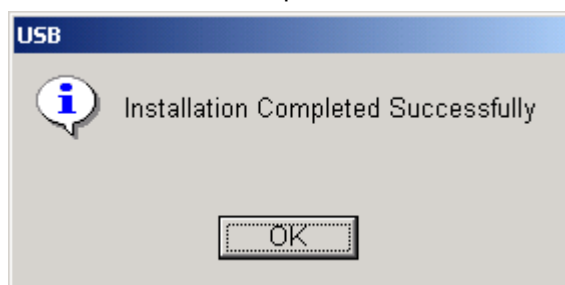
7. The driver has been installed successfully. Click **“Finish”** to exit the wizard.



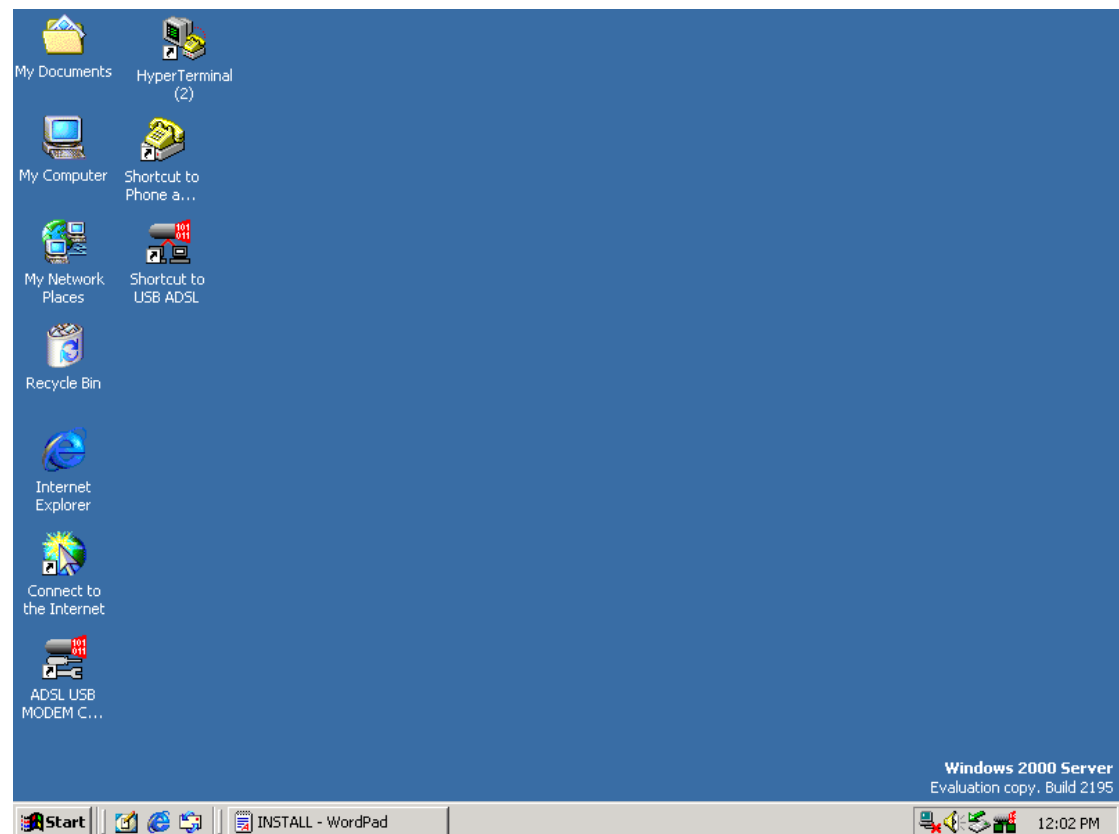
8. Connect USB ADSL MODEM into your computer.



9. Installation is complete. Click **“OK”**.

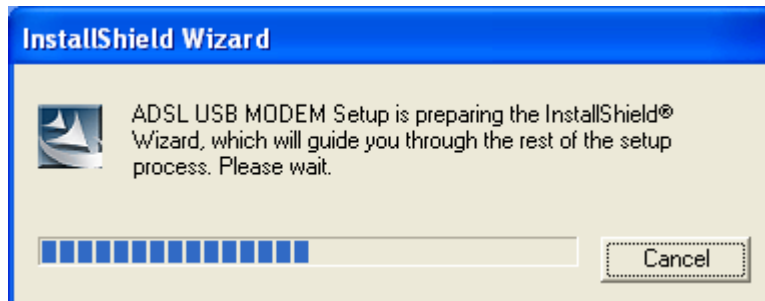


10. The shortcut of USB ADSL MODEM icon will display on the desktop.

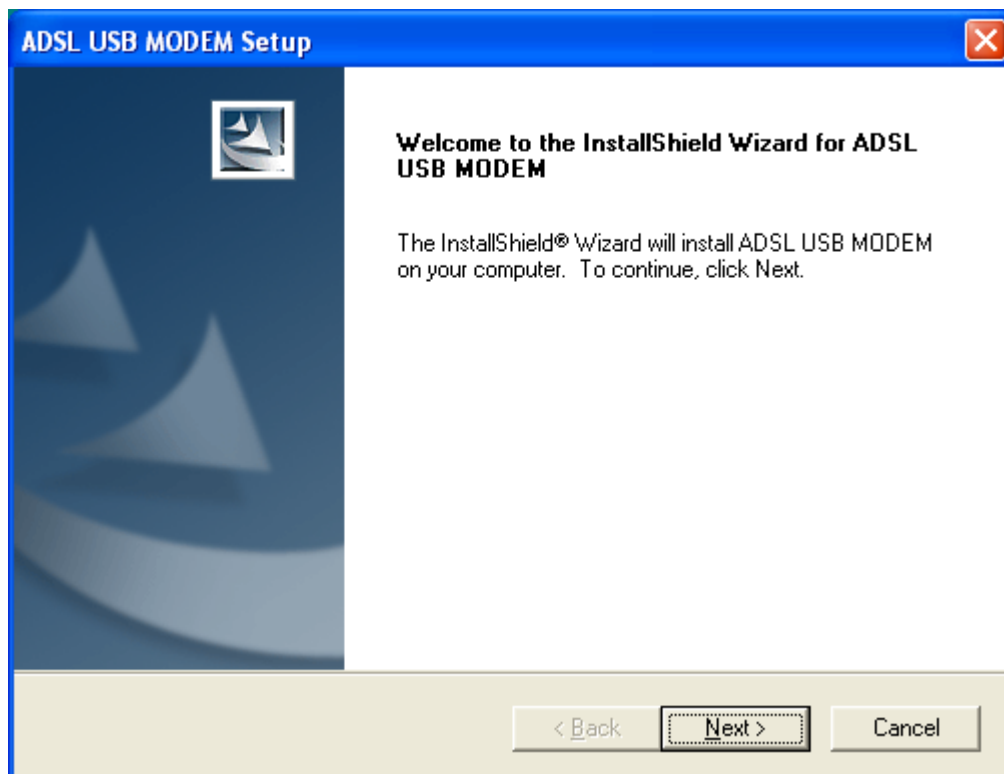


Windows XP

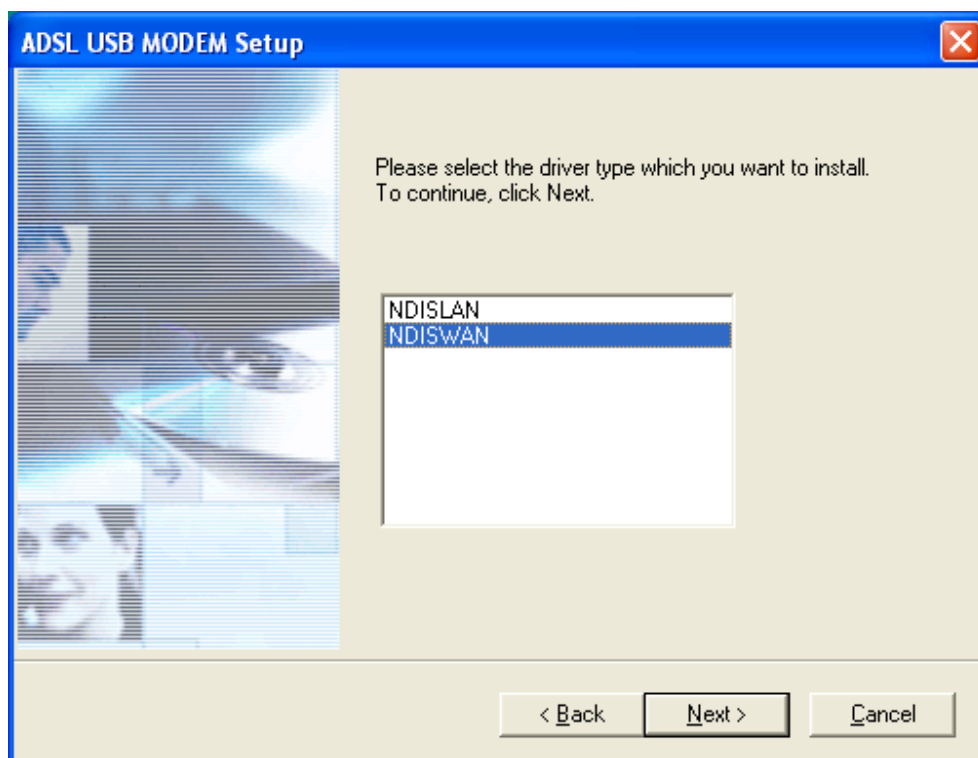
1. Insert the driver CD into CD-ROM device and the install wizard will prepare the installation and guide you through the setup process.



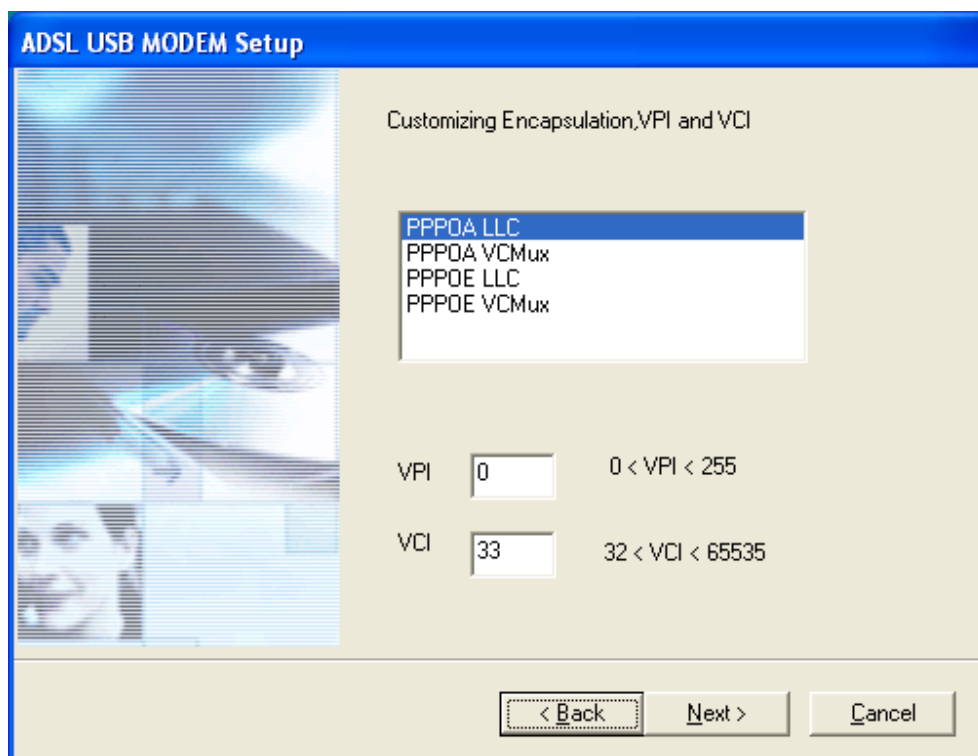
2. The install wizard is ready to install the driver. Click “**Next**” to continue.



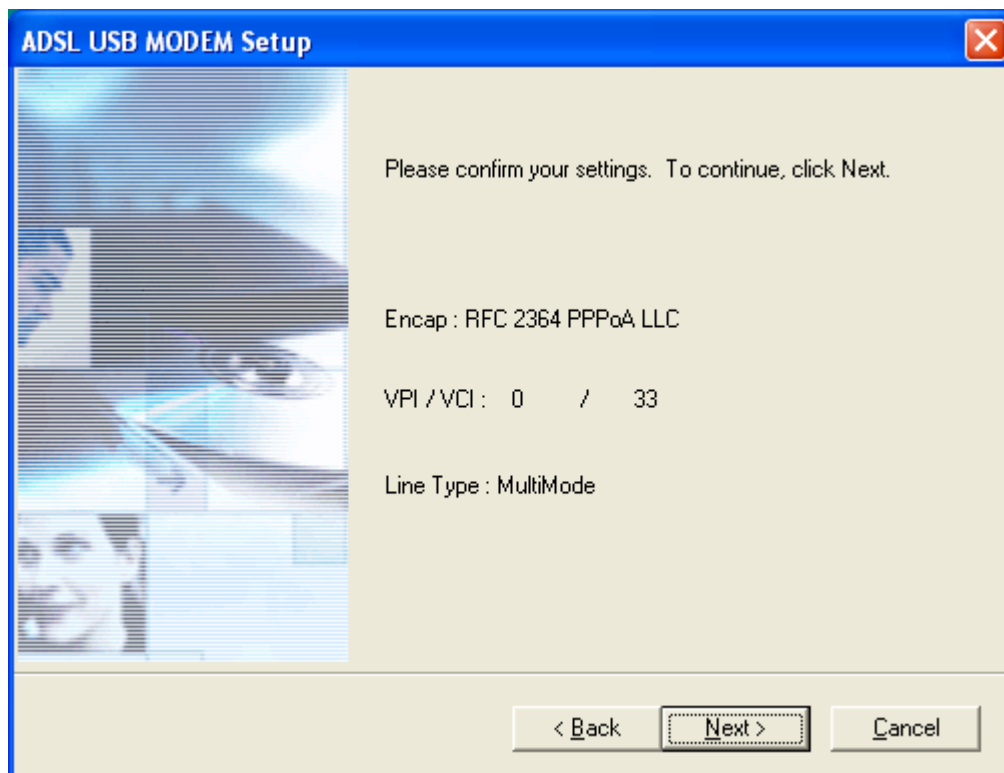
3. Select the driver type. Please refer to information given by your DSL service provider.
(Select NDISLAN in the LAN mode; select NDISWAN in the WAN mode)
Then click **“Next”** to continue.



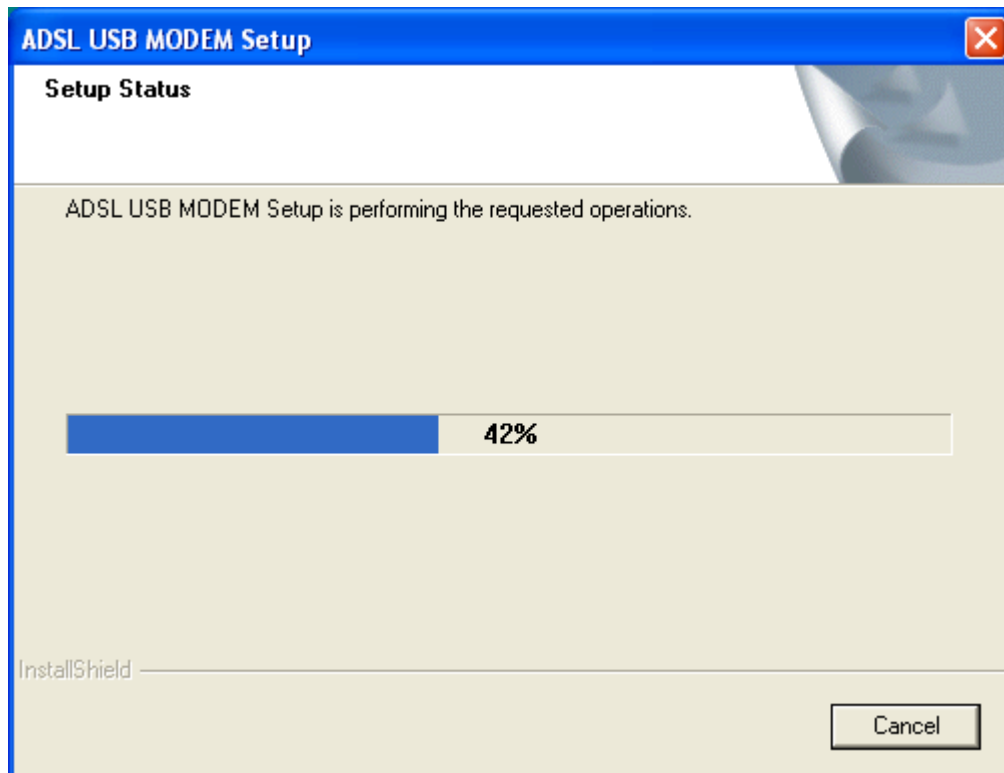
4. Select encapsulation mode and enter VPI/VCI values. Please refer to information given by your DSL service provider. Then click **“Next”**.



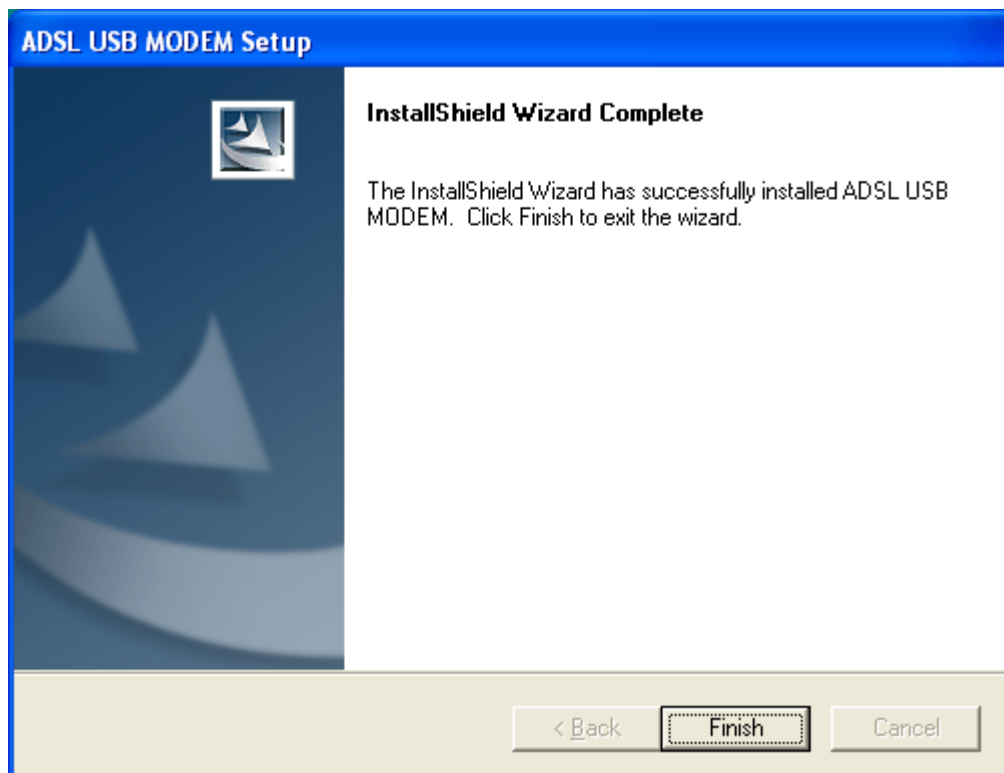
5. Please confirm the settings and click "**Next**" to continue.



6. The wizard is processing the installation.



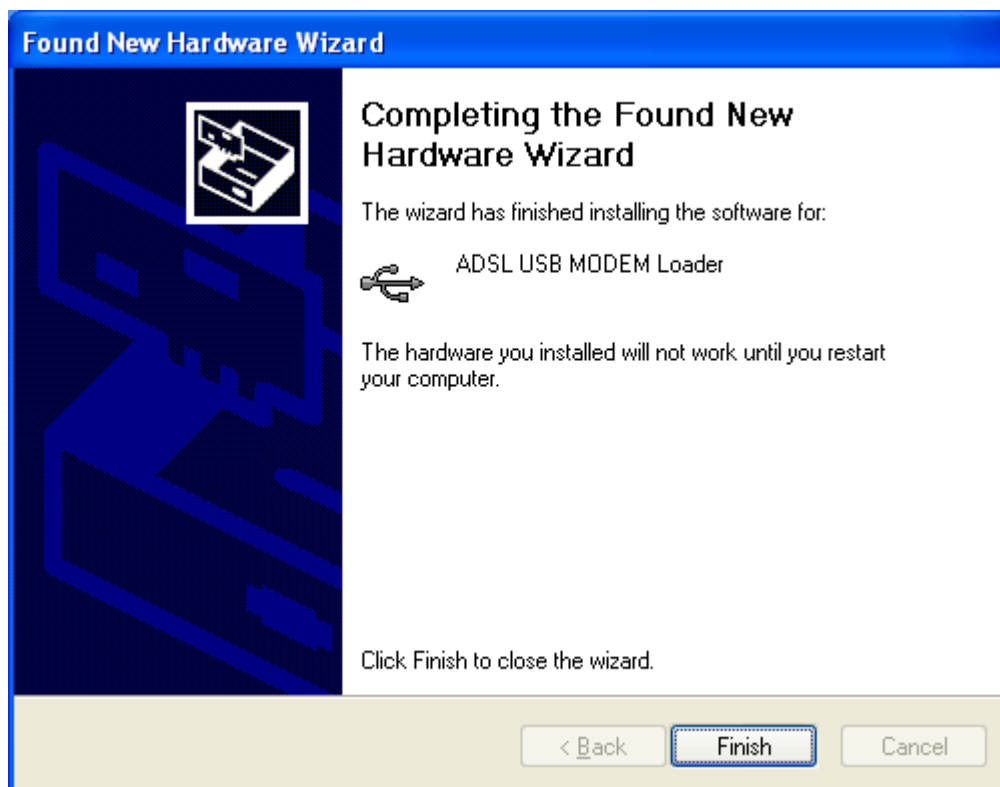
7. The driver has been installed successfully. Click “**Finish**” to exit the wizard.



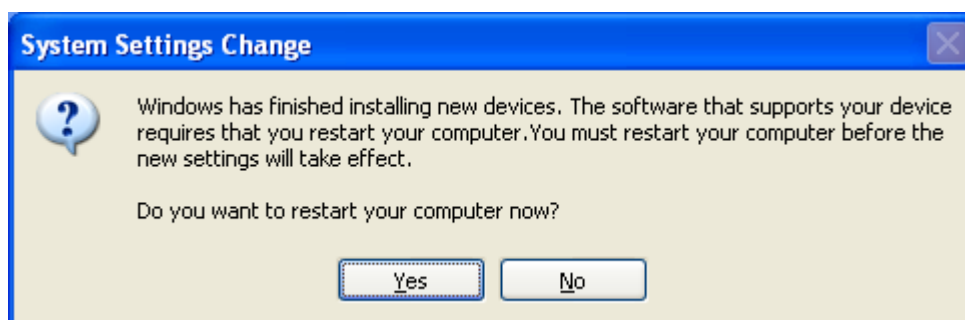
8. Connect USB ADSL MODEM into your computer.



9. Installation is complete. Click **OK**.



10. Please close all application programs and click **Yes** to restart the computer.



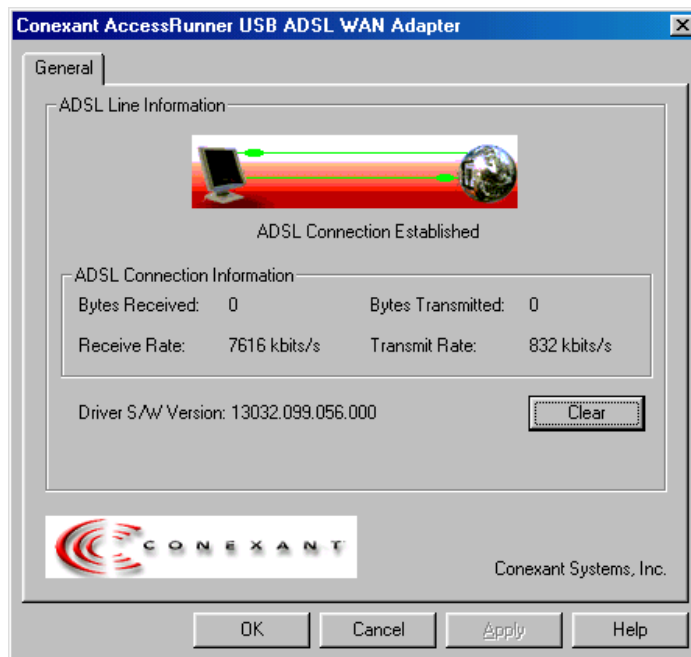
11. The shortcut of USB ADSL MODEM icon will display on the desktop.



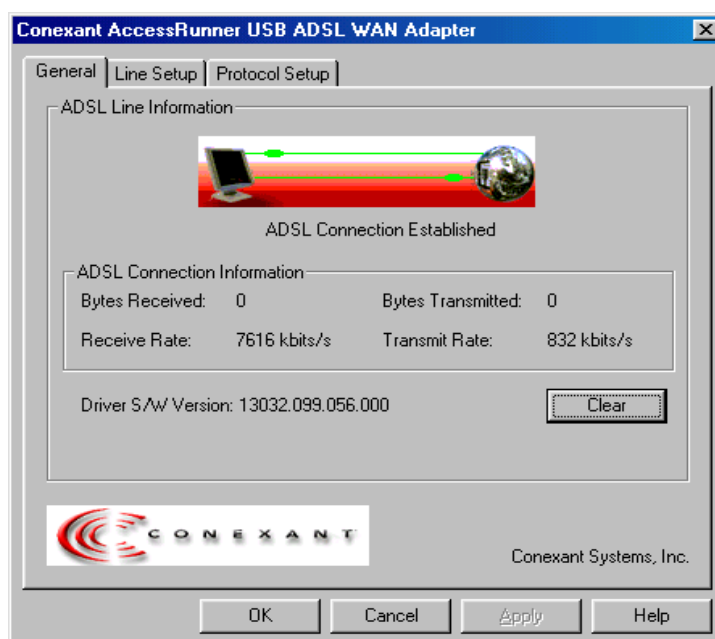
Configuration Your ADSL Modem Networking Settings -- WAN Setting the Configuration to PPPoA(RFC 2364) & PPPoE(RFC2516)

. Windows 98 FE / 98 SE/ME/2000/XP

1. After your PC has rebooted, double-click **AccessRunner ADSL** icon on desktop.



2. You can click a hot-key < **Alt+C** > to open the Advance Table directly. Then, General / Line Setup / Protocol Setup Table will display.



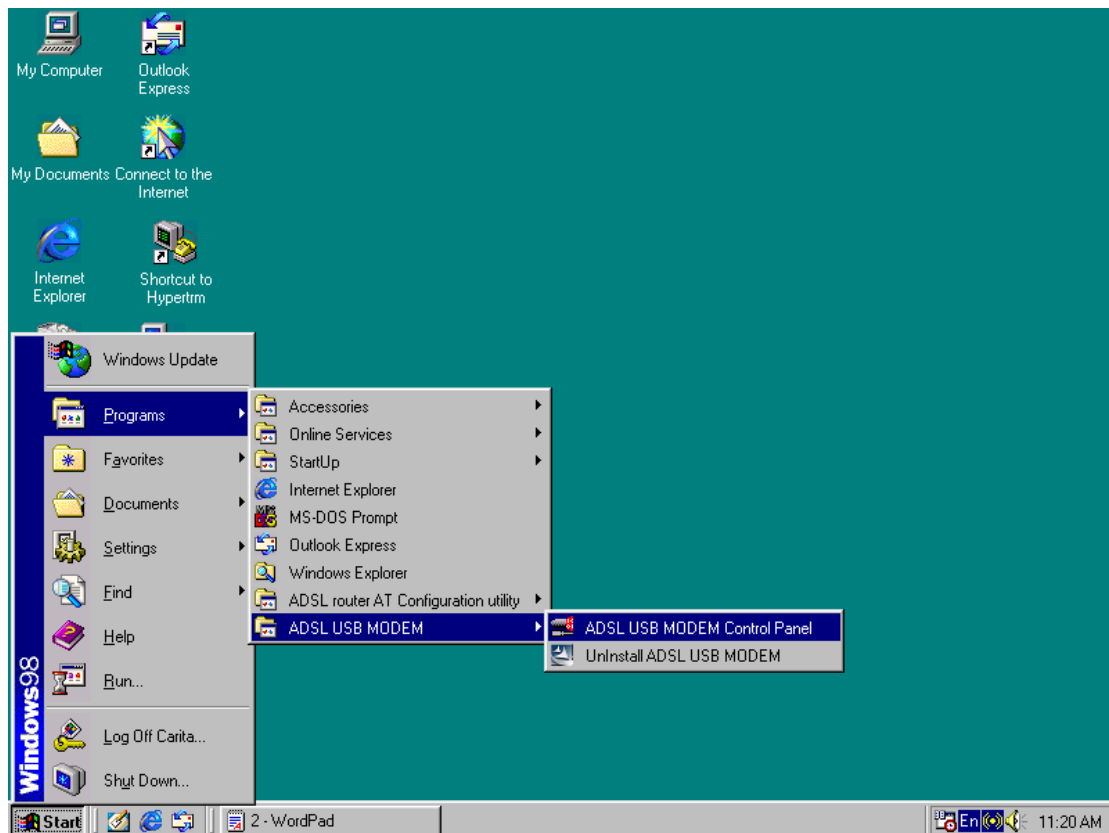
3. Select **Line Setup** table to choose Modulation supported by your ADSL provider.

The screenshot shows the 'Conexant AccessRunner USB ADSL WAN Adapter' dialog box with the 'Line Setup' tab selected. The 'General' tab is also visible. The 'Modulation' dropdown is set to 'Automatic, ITU G.dmt or G.lite preferred'. The 'Wiring Selection' dropdown is set to 'Line Tip/Ring'. The 'ADSL Head End' dropdown is set to 'Alcatel Network Systems Inc.'. The 'ADSL Head End Env.' dropdown is set to 'Non-Specific'. At the bottom are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

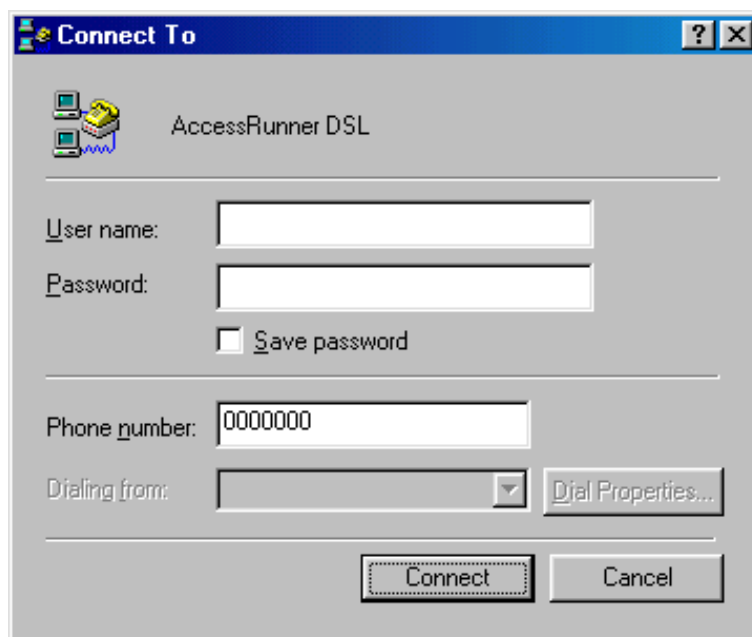
4. Click the **Protocol Setup** table and edit the VPI, VCI and Encapsulation Mode.

The screenshot shows the 'Conexant AccessRunner USB ADSL WAN Adapter' dialog box with the 'Protocol Setup' tab selected. The 'General' and 'Line Setup' tabs are also visible. The 'ATM Virtual Circuit Identification' section has two columns: 'Virtual Circuit 0' and 'Virtual Circuit 1'. Under 'Virtual Circuit 0', the 'Virtual Path Identifier (VPI)' is set to 0 and the 'Virtual Circuit Identifier (VCI)' is set to 35. Under 'Virtual Circuit 1', the fields are empty. The 'Aggregate Channel Setup' section has an 'Encapsulation Mode' dropdown set to 'PPP over ATM VCMUX (RFC2364)'. A list of options is shown below it: 'PPP over ATM VCMUX (RFC2364)', 'PPP over ATM LLC (RFC2364)', 'PPP over Ethernet VCMUX (RFC2516)', and 'PPP over Ethernet LLC SNAP (RFC2516)'. The 'Maximum Packet Length' section has 'Receive' and 'Transmit' fields, both set to 1500. At the bottom are buttons for 'OK', 'Cancel', 'Apply', and 'Help'.

- From **Start** menu, run **Programs/AccessRunner DSL/AccessRunner DSL**.



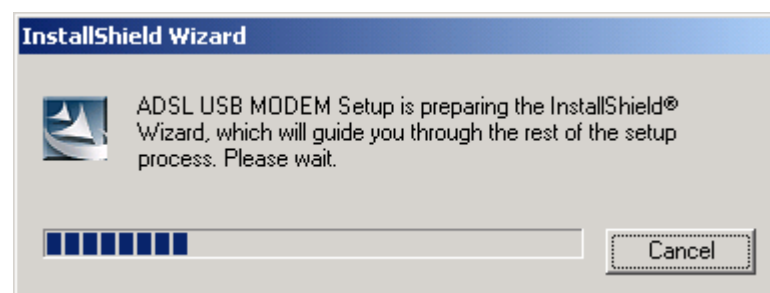
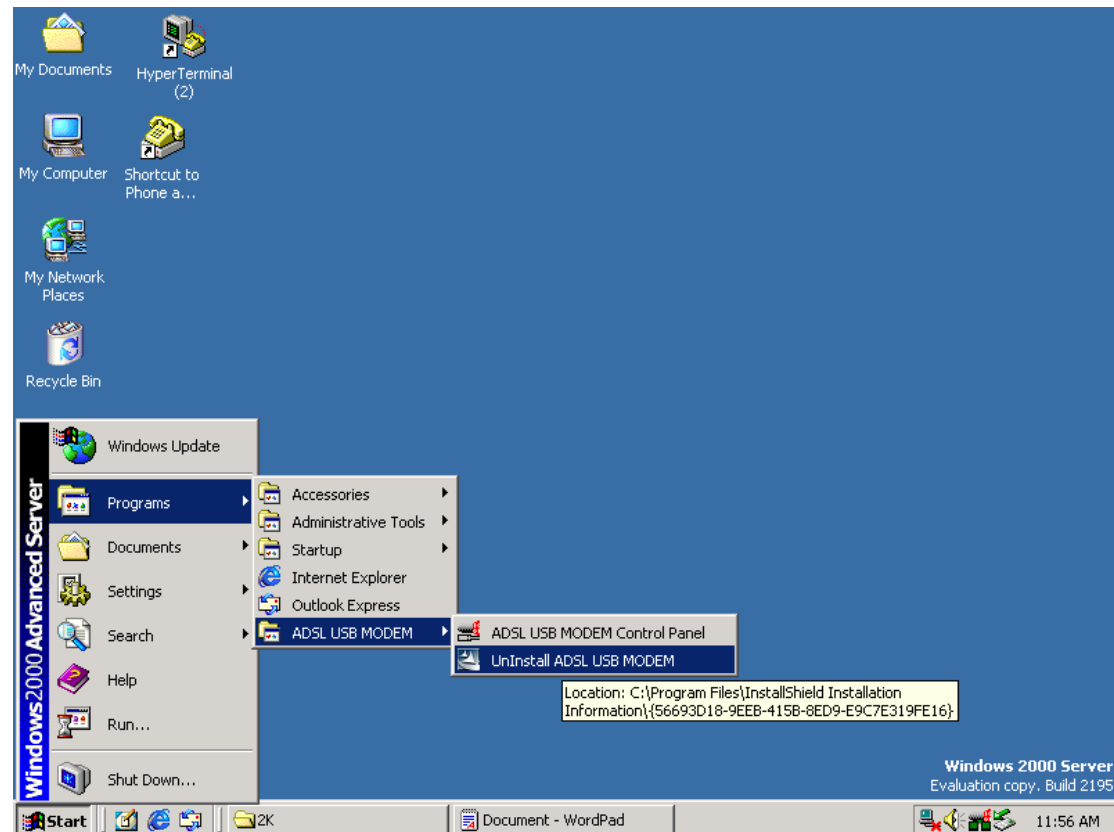
- Enter the **User name** and **Password** supplied by your Internet service provider (ISP). Then click **Connect**.



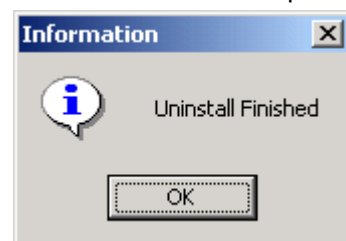
Uninstall ADSL USB Modem

Windows 98SE/98SE/ME/2000/XP

1. Detach USB ADSL MODEM from your computer.
2. Run **Start -> Programs -> ADSL USB MODEM -> Uninstall ADSL USB MODEM**



3. Click "OK" to complete.



4. Restart your computer. If the system does not perform a restart procedure, please restart the computer manually.